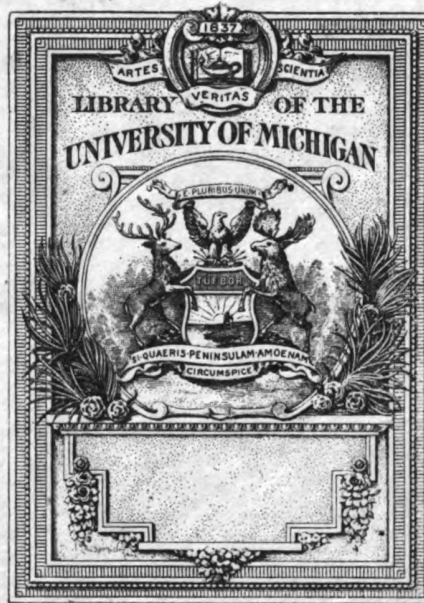




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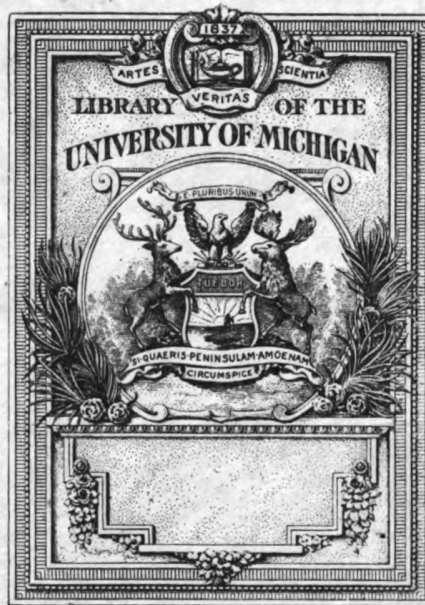


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# THE MEDICAL PRESS AND CIRCULAR.

"SALUS POPULI SUPREMA LEX."

VOL. CXXXIX.

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No. I.

## NOTES AND COMMENTS.

Messrs.  
Cadbury—

ONE of the great difficulties that confronts those who are interested in the public health is the problem how to procure proper health conditions for workers in factories. The "urban-trend" of the population of these isles is a great fact which has to be faced, and though the excellent Small Holdings Act, passed two years ago by the Government, may do something to keep agricultural labourers *in situ*, and to attract to the land the more sturdy of town-workers, the fact remains that industrial pursuits and town life continue to draw an enormous number of workers to the great centres of industry. It is all very well, and it is certainly very proper, to make regulations for the sanitary conduct of factories, schools and other large buildings, but the problem of the home remains to be solved, and even the most ardent local administrator cannot succeed in providing healthy houses and healthy conditions of life for workers who have not the instinct of cleanliness and decent living. An admirable example of what may, and has been, done through private enterprise by a firm which has its servants' interests at heart is shown by a little pamphlet issued by Messrs. Cadbury on the growth of their business in the last thirty years, and the way in which they have simultaneously coped with allied difficulties in keeping their staff well provided for in the matter of home life. In this pamphlet is set forth a table showing the growth of the number of workers employed in the factories, which is little less than astonishing. In 1879, 66 men, 140 women, and 24 clerks, travellers, &c., were employed, and in spite of improved machinery, which did away with the necessity of much manual labour, the numbers have steadily risen, till they now reach the gigantic total of 1,563 men, 2,913 women, and 447 travellers, clerks, &c.—4,923 employees in all, as compared with 230 thirty years ago.

And their  
Workers.

MESSRS. CADBURY'S principles with regard to their business is that the efficiency of workers is largely determined by their conditions of living, and consequently they have built a "model" town with "model" houses for the residence of those attending at Bourneville, and have instituted a system of pay whereby the workers have a margin over the necessary "living wage"; no man over twenty-three, married or unmarried, receiving less than 24s. a week for a definite number of hours' work and appropriate holiday conditions, fines being altogether eliminated. A medical officer is attached to the staff, and he is able to show that the sickness-rate is exceedingly low, at present barely 1½ per cent., the first quarter

of this year—considered a heavy one—showing 2.3 weeks per sick worker, against 8.4 weeks per sick member of the leading friendly society. The mortality-rate last year was but 2 per 1,000, and the phthisis mortality but .4 per 1,000—rates which we believe are vastly lower than those existing in any other community. Accidents are very few, only 6, 8 and 7 serious ones having occurred in the last three years, a result largely due to proper inspection of machines and machine-guards. Another point which strikes us forcibly is the abolition of the employment of married women, which was carried out many years ago, and we heartily congratulate Messrs. Cadbury in having secured this most beneficent reform. When we remember that all members get Sundays, Bank Holidays and half Saturdays for holidays, that the hours for women is kept below 42 hours per week, and that the contracts for buying cocoa from the Portuguese islands where cruelties were carried on have been abolished, we may fairly say that Messrs. Cadbury seem to have attained that point in hygiene and healthiness among their workers which all sanitarians are striving for through the whole country.

Medical  
Responsibilities.

AS application of unusual importance to medical men was made in the Divisional Court last week on behalf of a retired greengrocer to compel Dr. Willey to disclose the present address of his (the applicant's) wife. It seems that the woman in question had been a patient at Dr. Willey's establishment suffering from delusions, and on her recovery she had been sent to a farm in the country to get rest and quiet, which she could not obtain at home. An affidavit was read from the wife accusing her husband of cruelty, and saying that it would kill her to return home, and that she was happy and well cared for. Counsel asserted that the real reason the husband wished to get at her was because she possessed money, out of which, it was announced, she made her husband an allowance. It was submitted on behalf of Dr. Willey that an independent medical man should be appointed by the Court to say whether or not the wife was still suffering from delusions. However, the Court refused the application, saying that Dr. Willey could not be ordered to produce the woman who was not in his custody, and that there was no evidence that he had behaved otherwise than perfectly properly. This is an encouraging result, for if the reasons were as stated in the wife's affidavit, it would have been cruel to have allowed the husband access to her, and Dr. Willey showed great courage and sense of duty in protecting his patient by resisting an unreasonable demand.



**The Edinburgh Chair of Surgery.**

THE resignation by Professor Chiene of the Chair of Surgery in Edinburgh University removes a figure that has been familiar to many generations of students. Professor Chiene is now 66 years of age, and his teaching career may be said to have begun in 1866, when he was Demonstrator of Anatomy under Mr. Goodsir and Mr., now Sir William, Turner, and he was closely connected for many years with Mr. Joseph—now Lord, Lister. In 1870 he was appointed Lecturer on Practical Surgery in the Extra-Mural School, and he was later chosen for the Chair of Surgery in the University, on the death of Mr. Spence. In 1900 he was appointed Consulting Surgeon to His Majesty's Forces in South Africa, and for his services in the Boer War he was mentioned in despatches and made a C.B. During this long and distinguished career Professor Chiene has always been extremely popular with students, and it is safe to prophesy that any proposal to create a testimonial fund will meet with hearty support wherever Edinburgh medical graduates and diplomates are to be found, that is to say, from all parts of the world. We doubt if John Chiene has an enemy in the wide world, while it would be hard to find a man with a larger circle of friends and admirers.

## LEADING ARTICLES.

### THE ANNUAL MEDICAL REPORT OF THE LOCAL GOVERNMENT BOARD.

THE Supplement to the Thirty-seventh Annual Report of the Local Government Board, containing the Report of the Medical Officer, has been issued for 1907-08. This is the second Report of the kind signed by Dr. Arthur Newsholme, who succeeded Sir William Power, K.C.B., F.R.S., on his retirement in January, 1908. We are told that the present report, like its immediate predecessor, is concerned almost entirely with work carried out by the predecessor of the present medical officer, whose comments are consequently brief. The Report, indeed, consists chiefly of a summarised statement of what has been done at home as well as in various other parts of the world directly or indirectly concerned with public health progress. Apart from the medical officer's short communication, the bulk of the Report is made up of 254 pages of reports of medical inspectors in appendix, and of a further 191 pages of special bacterial investigations. Turning to the work of the medical inspectors, we find much that is of interest and practical value. A report by Dr. Deane Sweeting deals with enteric fever in the Borough of Leigh, Lancashire, where this disease is endemically prevalent, and produces a death-rate more than twice the mean death-rate for the seventy-six great towns of England and Wales. The official inquiry showed a much greater incidence upon the colliers than upon the rest of the population, and subsequently disclosed most unsatisfactory arrangements for sewage-disposal at the local collieries, both above- and underground. Dr. Theodore Thomson, in his report upon the sanitary circumstances and administration of Yeovil, has drawn attention to many unwholesome conditions in that borough that might readily be removed. Curiously, though, there is an undue prevalence of scarlet fever and diphtheria; the

death-rate in 1908 was 14.80, and the mean annual death-rate for the preceding decade, 1896-1905, 15.01 per 1,000 of the population. A report that demands serious attention is that by Dr. Johnstone on the rural district of Sherborne, in Dorset. The chief local industry is dairy-farming, and about 1,000 gallons of milk are sent out daily to London, Aldershot and other places, besides about 1,000 gallons a day converted into milk powder at a factory. As to sewers and sewage-disposal, no proper system exists in any of the villages of this rural district. The neighbouring river Yeo is seriously polluted with sewage, while the drinking-water supply in three of the constituent parishes "constitutes a serious danger to health." As to the dairy farms, no register is kept of the dairies and cowsheds. The majority of the sheds are ill-lighted and ventilated, their walls filthy, paving deficient, while many of the bartons are in such a condition of filth, caused by manure and mud and stagnant water, as to constitute a nuisance. As a rule, milkers neither wash their hands nor cleanse the cows' udders before milking. "The dairy farmers," Dr. Johnstone remarks, "were more opposed to reform in the personal methods of their milkers than to any proposition in the way of improved ventilation and drainage in the cowsheds. It was said by some farmers that the milkers would not submit to regulations for their personal cleanliness, and that milkers were very difficult to get. Other farmers said that if such regulations were insisted upon they would abandon dairy-farming." After reading this passage, our readers will probably agree with the terse comment of the medical inspector to the effect that the sooner men with these ideas give up dairy-farming the better it will be for the health of children and others who consume the milk. To this may be added the reflection that the sooner the practical control of local sanitary administration is taken away from such men the better for society. Under present conditions they constitute the local authority appointing a medical officer who is removable at will. Lastly, it is open to speculation as to how many a mysterious seizure of illness in London may be due to these filthy cowsheds in Sherborne, where "little or no attempt has been made to enforce the regulations adopted under the Dairies, Cowsheds and Milkshops Order." If the Local Government Board, with a report of this kind in their possession, fail to awake the Sherborne authorities to a strong sense of their duties, then the blame will rest with the central authority. The President of the Board, however, the Right Hon. John Burns, is hardly the man to pigeon-hole a document fraught with so much importance as the one under discussion. His careful consideration has also doubtless been given to the report by Dr. Fures on the five small semi-urban districts in the West Riding of Yorkshire, in the neighbourhood of Huddersfield. A striking picture is drawn of the sanitary evils resulting from the unfortunate fact that these five districts, with estimated populations of 1,435,500, 350,620 and 2,000 persons respectively, were many years ago constituted urban districts. The self-government thus conferred has led to many mischievous results, such as multiplication of poorly-paid officers, difficulty of organising comprehensive schemes for water supply and

sewage, overlapping of work, and the sacrifice of public to private interests. The matter contained in Appendix B is of conspicuous scientific value. Dr. Andrewes has continued his important investigations into the distribution of sewage bacteria in the air of drains. He concludes that the occurrence of such organisms mainly depends upon droplet contamination in splashing. Dr. Newsholme remarks that the importance of the facts recorded by Dr. Andrewes rests in the demonstration that sewage bacteria may be present in the air of a drainage system in ordinary use, and, as a matter of fact, are generally present after splashing has occurred. That consideration, however, is much modified by the observation that the effect of a single act of splashing is transient, lasting only a few minutes. Dr. Andrewes and Dr. Horder have continued their observations on the defence of the body against the pyogenic cocci. Dr. Gordon and Dr. Horder have made considerable advance in an attempt to determine the relative value of various anti-meningococcic sera on the market, claiming to be of prophylactic or curative value in cerebro-spinal meningitis. They found three such sera tested had no prophylactic or curative effect. Normal horse serum, on the other hand, had some small value in prolonging a rabbit's life. The two observers named are investigating more powerful sera recently introduced and some special vaccines. A valuable report has been furnished by Dr. Savage upon mastitis in cows, and its possible relationship to human disease. Dr. Savage thinks it probable that streptococci of the *streptococcus mastitidis* type do not ordinarily cause human sore throat; other points are still under investigation. Dr. Sydney Martin has shown that *streptococcus faecalis* injected into rabbits intravenously produces non-ulcerative vegetative endocarditis of the mitral valve, associated with septicæmia. With regard to the Report generally, it maintains in a conspicuous degree the high standard of excellence which has long since established the reputation of public health study and administration in the United Kingdom upon an unassailable basis.

#### THE ANNUAL ELECTION AT THE ROYAL COLLEGE OF SURGEONS, ENGLAND.

As we foreshadowed in a previous issue, the annual election of members to the Council of the Royal College of Surgeons, which took place on the 1st instant, has proved one of the most interesting of recent times. No fewer than 971 Fellows recorded their votes upon the occasion, a number which establishes a record in the history of these elections. Owing to the introduction of voting papers, a reform for which the Fellows have to thank the Association of Fellows, the method of voting has been reduced to a minimum of trouble; in former days it was necessary for each Fellow voting to attend at the College for the purpose; under the present arrangement, however, a voting paper is issued by the Council to each Fellow whose name appears upon the Postal List, and all that he is required to do is to fill in the paper, with a mark opposite the name of the candidate whom he desires to support, sign it, and return it to the College through the post. Thus but little is required of him in this

regard, while he is relieved of an oftentimes impossible journey to the College for the purpose of taking a personal part in the poll. The result of the election just held must be regarded as a surprise. Of the three retiring councillors who sought re-election, only two—Sir W. Watson Cheyne, Bart., and Mr. Harrison Cripps—have been successful, while the third—Mr. Mayo Robson, who has filled the office of Vice-President of the College—was the last on the list. We believe that this latter incident establishes another record. It is only rarely, as we have previously pointed out, that well-known representative surgeons, retiring from the Council, are not re-elected when they seek re-election. In accounting, however, for the deflection of votes to which Mr. Mayo Robson owed his position at the poll, it is essential to remember that the loyalty of the various medical schools towards their representatives had probably a great deal to do with the result. It is curious somewhat to recall that the first occasion upon which the above well-known surgeon competed for a seat on the Council, he was returned by a large majority at the head of the poll. In those days, however, he was a representative of the Provincial Fellows, and the adopted candidate of the Association of Fellows, which at the time had begun to wield a considerable influence in securing the return of candidates to the Council. Since then the position has changed; Mr. Robson is no longer a Provincial Fellow; he is not connected with any large medical school in London, and the Association of Fellows has ceased its active work. No question of policy was involved in the election just determined. As a matter of fact, at the present moment "College politics" are dead, so far as the Fellows are concerned; moreover, the time seems not to have arrived when the Fellows will make common cause with the members in contending for reforms which mainly affect the latter. Whether a combination within the "Body Corporate and Politic," organised for the purpose of extending the basis of the members' rights will ever be effected remains to be seen. Certainly, without the aid and co-operation of the Fellows, the members' task of contending with the Council seems a hopeless one, despite the patient persistency with which they urge their claims. Of course, it must be perfectly obvious to those who have studied what is known as the "members' question" that the only chance of making progress in their campaign is by securing influence in their favour upon the Council itself. In other words, with the Council unanimously hostile to their proposals, common sense suggests that the members may expect nothing, and experience suggests that in this regard they will not be disappointed. The first point, however, to which the members should direct their attention is to indicate their practical unanimity upon the question of the reforms, the consummation of which they seek to obtain. The body representing them—the Society of Members—we believe only consists of a small part of the total number of members, and this being the case, the natural inference is that the bulk of the members care little whether or not the political basis of their connection with their College is enlarged. THE MEDICAL PRESS AND CIRCULAR has always held an open mind upon this subject; and if the members

showed by an unequivocal unanimity that they were desirous of advancing their political position at the College, we doubt not that they would be accorded much support among the broad-minded Fellows, as well as in the columns of the medical journals.

## CURRENT TOPICS.

### Anti-Vivisection Fiasco.

THE feebleness of the anti-vivisection case is exposed over and over again. To keep the flickering flame of their "horrors" alive they either quote barbarisms carried out in remote times when people were burned alive and the torturing of criminals was countenanced, or they invent imaginary "cruelties," like M. Coleridge's Oxford puppies. Not one of the latter-day "tortures" ever stands a moment's cross-examination. The latest alarm which has been agitated by these false humanitarians is the discovery in the Home Office Inspector's Annual Report of a sentence which drew attention to the fact that an experimenter who only held certificate B, had exposed a certain number of animals to X-rays without their being anaesthetised. None of these experiments were in the least severe, in fact, men, women and children are exposed to the rays every day under precisely the same conditions, but because he had not obtained the particular licence to enable him to operate without an anaesthetic, he committed a technical offence. On being questioned, the Home Secretary detailed these circumstances, and mentioned, moreover, that the experimenter would have received permission without difficulty if he had asked for it, but he had not understood which was the proper certificate to apply for. So this "horror," which we have seen described by all sorts of barbarous terms, is not only no horror at all, but a purely technical business arising out of the stringency of the Act. Scientific men have too much to do, as a rule, to study exhaustively all the details, regulations and administrative details of all the Acts affecting their study, and naturally they rely, like ordinary human beings, on what they are told or what they understand to be needed, and it is remarkable that, under the complicated rules and procedure under the Experiments on Animals Act that so few irregularities occur. In this particular technical transgression the anti-vivisectionists wish the Home Secretary to take legal proceedings. Of course the Home Secretary is not going to expose his office to ridicule by any such farcical proceedings. However, the anti-vivisectionists have their own remedy—they can themselves prosecute at common law or under the Act, and they have their evidence. If they are not prepared to do so, the least they can do is publicly to apologise to the gentleman they have abused. We need hardly say we do not expect them to make such an egregious exhibition of themselves as to do the former, nor anything so honourable as the latter.

### The Anaesthetics Bill.

THE Bill introduced to the House of Commons last week by Dr. Cooper for the control of the administration of anaesthetics is hardly expected to reach the Statute-book. It is probably intended by its author merely to focus discussion, and thereby aid in the framing of legislation in the future. Under this measure medical practitioners and dentists applying for registration on or after January 1st, 1912, would be required to submit evidence of having received theoretical and practical instruction in the administration of anaesthetics,

and any person not a registered medical practitioner or dentist would be prohibited from administering an anaesthetic, except under the immediate direction and supervision of a registered medical practitioner or dentist. In the case of persons dying under an anaesthetic medical men would not be permitted to give certificates of death. We agree with the view that medical men should before registration receive instruction in the art of administering anaesthetics, and it is deplorable that the General Medical Council has not long ago enforced the necessity of such instruction on the licensing bodies. We are still unconvinced, however, that there is any reason why dentists should have special privileges as regards the administration of all anaesthetics. Moreover, one of the greatest abuses as regards the administration of anaesthetics was administration by dental mechanics and surgery attendants, an abuse the Bill appears to perpetuate. We fail to see, moreover, any advantage in forbidding death certificates to be issued in the case of deaths under anaesthetics, until there be some proper means of inquiry into such occurrences. A coroner's jury obviously is not a fit tribunal to conduct the investigation.

### The International Medical Congress.

WE have recently received a circular giving fairly full particulars of the programme of the Sixteenth International Medical Congress, which is to be held from August 29th to September 4th of this year in Budapest. Dr. Pavy is President of the British National Committee, whose list contains many well-known names. The list of reports and communications to be made to the Congress, however, contains very few British names. It would seem, indeed, that the interest in the Congress is somewhat declining, at any rate, in these countries. This is not to be wondered at, as in some of the previous meetings the arrangements were so careless as to prevent those who attended gaining either profit or pleasure. Moreover, owing to our national ignorance of foreign languages, there are comparatively few Englishmen who can, with advantage to themselves, follow a discussion in which four official languages are permitted. It is more than doubtful whether these congresses do much directly to promote science, but in the opportunity given to workers in allied subjects to meet each other, and establish thereby a certain *rapprochement*, they have their function. We note that the International Association of the Medical Press is to hold its meeting before the Congress assembles. Budapest is a charming place for a holiday, and with one of the numerous excursions arranged for attendants at the Congress thrown in, medical men have a chance of a very pleasant change.

### The New Tuberculosis Order, Ireland.

WE published last week an epitome of the Order just issued by the Local Government Board for Ireland under the Tuberculosis Prevention Act (Ireland) of 1908. As our readers know, we have freely criticised this Act during the time it was before Parliament, mainly on the ground that, whilst under it a considerable amount of personal inconvenience and worse might result, its mechanism was of such a character that it could effect but little good. This opinion was held by a large number, if not by the bulk, of the medical profession in Ireland, and we fear that the new Order will do little to remove it. According to the Act, the Order could only be promulgated by the Local Government Board "after consultation" with the



Presidents of the Royal Colleges of Physicians and Surgeons of Ireland. It appears that this condition was placed in the Act without permission either of the Colleges or of their titular heads, and consequently it would not be strange if the "consultation" prescribed by the Act was the mere pretence which is necessary to satisfy the Act. "After consultation" is a vague term, and it would perhaps prove of interest to the public generally, and to the medical profession particularly, if the Local Government Board could see its way to inform them: first, what the consultation was about; secondly, whether it was ever finished; and thirdly, if the answer to the second question is in the affirmative, and whether the Board acted, upon the opinion of the Presidents? If the answer to these questions cannot be given and is unsatisfactory, it is obviously the merest farce to bring the names of the Presidents of the two Colleges into the matter. We express these opinions because we consider the Order to be unsatisfactory, and to impair rather than to strengthen the existing public health laws.

## PERSONAL.

Two young medical men, whose names are reported as Drs. Cook and Crinks, appear to have behaved with much humanity and bravery in the recent catastrophe at Newport. At the risk of their lives they tended the buried workmen on the spot, and were the means of saving several lives. In one instance they amputated a man's crushed feet in order to extricate him, but the unfortunate man died from shock.

SIR W. WATSON CHEYNE, Bart., Mr. W. Harrison Cripps, and Mr. R. Clement Lucas were elected Members of Council of the Royal College of Surgeons, England, at the annual meeting of Fellows.

THE unsuccessful candidates at the College election referred to were: Mr. J. Bland-Sutton, 333 votes; Mr. Walter H. Jessop, 333 votes; Mr. Charles A. Ballance, 261 votes; and Mr. A. W. Mayo Robson, 208 votes. We refer at length to the election in another column.

DR. W. A. MACKAY has been presented by the King of Spain with the White Cross Eagle of Carlos IV. for distinguished surgical aid to the Guardia Civil.

MR. ARTHUR CONNELL, F.R.C.S.E., has been appointed to the Lectureship in Practical Surgery in the University of Sheffield, in succession to Dr. George Wilkinson.

THE Chesterfield Medal in Dermatology given by St. John's Hospital for Diseases of the Skin, Leicester Square, has this year been awarded to C. A. McBride, M.D., L.R.C.P.

ON June 26th, Dr. Frederick Pavy, F.R.S., was presented at Oxford with a silver bowl in commemoration of his eightieth birthday, by the Physiological Society. Professor Gotch, who presided, made a sympathetic speech.

At the annual general meeting of the London Nottinghamshire Society, held on June 24th, Mr. Sydney Stephenson, M.B., F.R.C.S.Ed., was elected President of the Society for 1909-10.

A MEDALLION of Lord Lister, the work of Mr. John Keller, presented by past and present students, was presented by Dr. Barber to the Glasgow Royal Infirmary last week.

THE committee of management of Brompton Hospital invite any lady or gentleman wishing to inspect the sanatorium and to see the patients at work to pay a visit to Frimley on Saturday, July 17th, when

the annual garden party will be held, and at which Princess Christian has announced her intention of being present.

DR. EDWIN SMITH, Assistant Director of the Soudan Medical Department, Khartoum, has been accorded permission by the King to receive and wear the insignia of the Fourth Class of the Imperial Order of the Osmanieh, conferred on him by the Khedive.

THE medical students of Glasgow University met in the Union on June 24th to make a presentation to Professor John Cleland, whose intention to retire from the Chair of Anatomy, which he has occupied for 32 years, has already been intimated. Mr. R. R. Archibald, President of the Students' Union, was in the chair.

THE Anatomical Society of Great Britain and Ireland, which was founded in 1887, on June 25th held its annual summer meeting in Bristol for the first time, the chair being taken by the President, Professor A. M. Paterson, M.D., of Liverpool University. The Conference was well attended by representatives from various parts of England, Ireland, Scotland, and Wales, whilst Professor Ramström, of Upsala, was also present.

At a meeting of the special election committee of the Leeds Infirmary, Mr. L. R. Braithwaite, M.B., Ch.B., F.R.C.S., was appointed hon. assistant surgeon in charge of the Ida and Robert Arthington semi-convalescent hospitals.

A MEETING of the Board of Management of the Manchester Royal Infirmary was held on June 29th, Mr. W. Cobbett (Chairman) presiding, when the following appointments were made:—Mr. Howard Buck, M.B., Ch.B. (Victoria), Surgical Registrar; Mr. R. A. Atkinson, M.B., Ch.B. (Victoria), Junior Anæsthetist.

THE Raymond Horton-Smith Prize in the University of Cambridge for 1909 for the best thesis during the past year for the Degree of Doctor of Medicine has been awarded to Mr. Henry Hallett Dale, M.A., M.B., B.C., of Trinity College. Mr. Cecil Herbert Winter Page, M.A., of Corpus Christi College, was adjudged *Proxime accessit*.

THE Therapeutical and Pharmacological Section of the Royal Society of Medicine will meet at Cambridge on July 10th. There will be demonstrations in the Pharmacological Laboratory by Professor W. E. Dixon and others, and at 6.30 p.m. the annual dinner will be held in the Hall of Downing College.

THE governors and medical staff of Guy's Hospital will give a garden party on Thursday, July 8th, at 3.15 p.m., when the medals and prizes for the year will be distributed to the successful students by his Grace the Duke of Devonshire.

DR. JAMES DOUGLAS, of Quebec and New York, has founded a Douglas Studentship for Research in Actino-Therapeutics, with special reference to cancer, at Guy's Hospital Medical School. The studentship is tenable for one year, is of the value of £300, and is open to all persons who possess a registrable British medical qualification.

THE annual meeting of the Poor-law Medical Officers' Association began yesterday, at the Guildhall, London, the Poor-law medical officers of England and Wales considering the recommendations of the Royal Commission on Poor-law Medical Relief. The conference was opened by the Lord Mayor in the Council Chamber.

PAPERS are being read by Dr. Major Greenwood, D.P.H.; Mr. C. S. Loch, Secretary of the London Charity Organisation Society; Mrs. Sidney Webb; Dr. F. S. Toogood, Medical Superintendent, Lewisham Infirmary; and Dr. G. F. McCleary, M.O.H., Hampstead.

# A CLINICAL LECTURE

## ON

### RECENT EXPERIENCES OF THE SCHÄFER METHOD OF ARTIFICIAL RESPIRATION. (a)

By CLINTON T. DENT, F.R.C.S.,

Surgeon to St. George's Hospital, Chief Surgeon, Metropolitan Police.

[SPECIALLY REPORTED FOR THIS JOURNAL.]

GENTLEMEN,—With regard to the actual *technique* of the Schäfer method of respiration I need say but little. It is founded on the principle of utilising abdominal respiration. It has some features in common with the method which was introduced and which was demonstrated in this country by Dr. Benjamin Howard, of New York. Schäfer's method utilises the fact that in ordinary tranquil breathing the diaphragm sinks with inspiration, and as it sinks it presses forward the epigastrium by pushing down the viscera. Reversing the process and compressing the epigastrium expels the air from the lungs. Schäfer does not desire that the thorax shall be compressed more than is absolutely necessary. He showed by experiments on dogs that this method brings about a large exchange of air, and his view is that more air is exchanged by this than by other methods. Others, however, doubt that, including Professor Keith in his recent lectures.

[Mr. Dent then demonstrated the Howard method on a healthy man, as Howard demonstrated it.]

Howard put a large pillow in the middle of the back for the patient to lie on, the patient being on his back, and his head bent well over the end of it, making practically a right angle with the body. Then he got astride of the patient, placed his hands on the spaces between the ribs, and forcibly compressed the thorax. It was the thoracic type of artificial respiration. According to Howard there was no need to hold forward the tongue, the position of the head in itself being sufficient. Howard grasped the lower ribs, and to some extent, therefore, he made pressure on the abdominal viscera, and pushed them against the diaphragm. At first Schäfer advised that a pad should be put under the thorax, but he had since abandoned that as not only unnecessary but positively injurious. The patient lies on a flat surface, the hands up towards the head and near each other, the face turned to one side, which is an advantage, because you can watch it. You can kneel at the side of the patient, but it is better to be astride him. The hands of the operator are put so that the thumbs are close together, the fingers an inch from the spine, as low down as you can. Our instructions to the police are that the hand be bent back, and that the lower part of the hand be placed just above the iliac crest, so as to be sure that one presses on the body, and not on the pelvis. The rest consists merely in throwing the weight of the body on to the hands so placed, at regular periods of time. Normally expiration comes in part from the natural resiliency of the abdominal wall. In a person apparently drowned, and in a dead person, the abdominal wall will be much less elastic and resilient than it is in a living person. The arms are kept straight, and at each forward movement a pressure of 40 to 60 lb. is made upon the patient's body; more than this is unnecessary, and might even do harm. Schäfer's method was worked out by means of experiments on dogs some years ago, and experiments have been made and repeated on the human subject. The first large body to take this new method up—and great credit is due to them for doing so—was the Life-Saving Society. Mr. Henry, the Secretary of that Society, is a man of great energy, and his boldness in the matter is deserving of the highest praise. That Society adopted it. At about the same time, dissatisfied with the method of Silvester and of Marshall Hall, I was anxious to see if this simpler method of Schäfer could be adopted in the Metropolitan Police.

We have to deal with a good many cases of death, or apparent death, by drowning in the course of a year. As anybody holding any office in a public department is practically a target to be shot at, with no opportunity for shooting back, I thought it better to have another opinion; and the Royal Society of Medicine appointed a Committee to investigate the matter as regards the treatment of the apparently drowned. Their report has been issued, and can be obtained, and it is a very interesting document. They advocated the Schäfer method in preference to others in cases of suspended animation by drowning. Therefore, it was adopted by the Metropolitan Police, and since then I know it has been adopted by many other bodies. I have had repeated demands for this document, and, as a result, it has been sent to various parts of the world. Though this method has been in use only a few months, and there are not very many cases to quote yet and form a judgment upon, I have here a record of all which have been tabulated so far, and enough has been seen to prove that the change in method is a judicious one. Every new method introduced on to the medical stage seems to pass through certain definite phases. All these new methods have their entrances—and but little acquaintance with medicine will convince one that they have their exits, too—and, full of promise, are launched as valuable discoveries. Then comes the critic, or, worse still, the deviser of a rival method, and they boom the question as a new departure. Embittered by an onslaught like this, it may go under altogether. But it may have marked a real advance, or it may perish neglected, having served its purpose. And we need not stop to inquire what, in some cases, that purpose was. If it survives, the originator will often be the next to fall foul of his own progeny; he will point out how greatly he has improved and modified what was uniformly successful when first launched. This has been curiously the case with the methods of artificial respiration and the resuscitation of the apparently drowned. They date back to 1774, when the Royal Humane Society was founded. A fair criticism, and one not without force, on the Schäfer method, has been that the experiment to show the degree of interchange of air which led to its introduction were made on living, healthy individuals, not on individuals who had reduced themselves to a state of apnoea by taking a number of very deep breaths preparatory to the experiment. As has been pointed out, the difference between the apparently drowned person and the living person is great. But Schäfer had experimented on dogs which had been immersed for a greater or less length of time, and in his evidence before the Royal Commission on Vivisection, he said he had been led to the discovery of his method largely by the results of these experiments. My chief object is to put before you the experience already gained by cases actually treated by it. There can be little doubt that it is the simplest method that has yet been devised, and it is certainly the best method to be employed when there is only one person at hand to restore animation. Records of cases show that persons have been, and will continue to be, revived by many other methods. The excellent lectures recently delivered on the subject at the Royal College of Surgeons, and printed in the *Lancet*, give a very good *résumé* of the whole question, from the foundation of the Royal Humane Society. Though I have not a large number of cases, some of them are very interesting.

First, with regard to suspended animation in cases

(a) Delivered at the Polyclinic, Chancery Street, W.C., on Wednesday, June 16th, 1909.

of drowning. There have been several of these cases under treatment. A fair proportion of the cases which the police have to deal with are attempted suicides. Persons still throw themselves off bridges, and it is curious to note how sometimes one bridge, and sometimes another, becomes absolutely fashionable for the purpose for a time. At one time it was Waterloo Bridge; perhaps there was some attraction in the name, or perhaps the little recesses fascinated them. It would be easier to jump from Westminster Bridge, but they do not do it. Sometimes they jump over the Embankment, and a curious point I may mention here with regard to that is, that we have noticed of late years that cases of attempted suicide by throwing themselves over the Embankment in the neighbourhood of Westminster and Waterloo Bridges, which were numerous, have become exceedingly rare. I asked an experienced member of the River Police—who had some interesting but gruesome stories to tell—if he could explain it, and he said he thought it was accounted for by the fact that in the old days, when people jumped over the Embankment they did so in the evening, especially in the winter: there was then little traffic along the Embankment, except a few hopeless wayfarers and wasters at a low ebb, who considered their lives not worth the holding. They did not seem to be moved to the act except at the very last. But every since the introduction of the tram-cars, with the electric light and the movement, these suicides have practically ceased. People probably go down there thinking of doing it, but the sight of the light and movement—especially the light—causes them to turn back. That is an interesting psychological fact. Many of the people who jump from the bridges do not meet their deaths by drowning, but by striking the buttresses. The attempts at suicide more often succeed with men than with women. An officer said that when a man gets into the water he is likely to persist in his intention; but a woman, who is, of course, always varying and mutable, perhaps due to her sex, when she gets into the water will do her best to get out again.

One case was that of a man, æt. 40, who was found in Regent's Park Canal, floating face downwards. It was uncertain how long he had been in the water, but his body was still warm when he was removed. The Schäfer method was applied to this man for half-an-hour, but with no success. I do not know that I ever heard of a system of this sort described before which commenced with a failure. But the method did not answer in this case, possibly because the man was already dead before it was applied. I mention it because we had a post-mortem on this case, and I would that a post-mortem was made on every one of them. Both lungs were found distended to their fullest extent. When the tissue was squeezed, air and water exuded. It was therefore certain that air had been got well into the lungs by this method. As usual, all the abdominal vessels were engorged with blood. An important point is that the Schäfer method not only pushes the viscera up against the diaphragm, but by this movement certainly stimulates the action of the heart, and in this respect it has an advantage over the other methods. Whether in these cases we should be too instant in emptying the veins of the portal system and the abdominal viscera, is a moot point. If you do, you are overfilling what is already too full. In the instructions given, great stress is laid on not wasting any time in removing or loosening the clothing. Schäfer was anxious that the movements of artificial respiration should be commenced instantly, but I think he carried the matter a little too far, and that some loosening of the clothes about the neck and elsewhere, particularly in the case of women, is desirable. The police have always to summon a medical man, and in this case the medical man gave his opinion to me that the thick clothing the patient had on appeared to have interfered with the movements and hampered sufficient pressure. I pointed out that the pressure should be gentle, because the viscera are engorged with blood, and after immersion the liver is very friable, and there is some risk of its rupturing. This accident has happened in dogs, but has not yet, I think, been recorded in human beings. But we do not get enough post-mortems. It is only likely to appear when methods such as the Howard method, or the

old-fashioned method of rolling a person to and fro on a barrel are practised. There is the question of interference with the descent of the viscera by tight clothing about the waist, or over the upper abdominal region, particularly a belt, or thick trousers, or corsets. These may interfere materially with the proper expansion of the epigastrium and the descent of the viscera. If an assistant is at hand it is certain he should devote his attention to loosening the clothing.

Another failure was in the case of a man, æt. 64, who jumped from a ferry steamer into the Thames, and was rescued by a boat-hook. He was said to have been immersed five minutes. The weather was bitterly cold at the time, and no doubt this, coupled with the man's age, rendered the case very unfavourable. Schäfer's method was practised in the boat while it was being rowed to the riverside station. This method is much more easily applied than is the Silvester method, and more so than the Marshall Hall.

Another case is that of a man, æt. 27, who threw himself into the Thames off Greenwich. He was rescued in an unconscious condition after only a few minutes' immersion, and was restored by the Schäfer method after ten minutes' work on the foreshore. That was the first successful case there was. The medical man came promptly in this case, and gave the fairly safe opinion that the man was suffering from the effects of immersion. It has been suggested to me by one or two divisional surgeons that the Schäfer method is more adapted for men than women, but I do not agree with that. The pressure should be gradual and gentle, the weight of the body being quietly thrown on to the patient's back. If this is done, the entrance and expulsion of air will be found equally satisfactory in both sexes, and will be as suitable for the stout as for the emaciated. Mr. Henry, of the Life-Saving Society, is convinced that, if you immerse a stout person and an emaciated person under the same conditions, and for the same length of time, the stout person has a decidedly worse chance than the thin. One assumes that neither has prepared himself or herself for immersion by taking a series of very deep breaths. There is an objection which has been urged against the Schäfer method, and it is one which I heard Silvester make a good deal of just before his death, that the astride position over the person is indecorous. But where it is a question of life or death I do not think that matters much.

Another case occurred at Portsmouth, and animation was successfully restored. The Silvester method was adopted for a time, but there was no return of breathing. Then came a police sergeant primed with these instructions, set to work by the Schäfer method, and restored animation. It is easy to claim that as a definite success for the Schäfer method, but I have no wish to do so, because the other method could not be said to have failed. The experience of the police themselves is altogether favourable to the Schäfer method.

The Committee of the Royal Society of Medicine were only asked: Was this the best method to apply in cases of suspended animation from drowning? I may, therefore, say a word or two about cases other than drowning in which this method has been employed. There was a case of unconsciousness, where the sufferer was overpowered by heat. The usual methods were employed, without result; there were no respiratory movements at all. Condition of heart not stated. The Schäfer method was employed for a few minutes, and animation was restored, and the doctor considered it proved of signal value. But he placed a large pad underneath the thorax, which is little more than the Howard method reversed.

Another case was that of coal-gas poisoning in a man, æt. 84, and a woman, æt. 77. The man's body was cold, and there was marked *rigor mortis*. In the woman the *rigor mortis* was confined to the muscles of the neck and lower jaw—possibly the muscles most used. The woman's body was warm, but she had got under the bed-clothes. There the Schäfer method was applied 1½ hours. It was noted that sufficient air could be pressed out to extinguish a lighted match. The teeth were closed, and the air got in easily by



the nose, showing that the position of the head is sufficient to make the tongue drop forward and open the glottis.

There was a suicide by attempted strangulation. A constable—an ambulance man—was told that a man was lying unconscious, with a flannel waist-belt tied round him, and the Schäfer method restored him in ten minutes. In such cases it is seldom that patients are not dead before help is called.

A boy, æt. 9, was climbing on to a cart, and the shaft apparently gave way and struck him a severe blow across the neck. The breathing stopped, and when help arrived the face was the colour of that of an asphyxiated person. The Schäfer method was adopted, and oxygen was applied by the medical man. Probably there was extensive injury to the pneumo-gastric and cardiac nerves in the neck. He recovered, but was very ill for a time, and was taken to a hospital.

In another case a woman attempted to drown two small children, æt. 3 and 4. The Silvester method was adopted, and it was stated that the medical man who was called in said it should not be applied in the case of children.

There was another case, where a constable was called a few days ago to a burning house, and found there was much smoke. He broke his way into the door and got upstairs, but was driven back by the volume of smoke which was pouring down. He understood there were children in the house—the parents, I think, had escaped. Being overcome by the smoke, he made his way down, got outside, took two or three deep breaths, wetted a handkerchief, put it over his mouth, and brought back a child, 3 years of age. Equal credit is due to a man who, seeing what was going on, did precisely the same thing, and he fetched out a child, 1 year 10 months old. They were both completely unconscious, overcome by the smoke, and in both cases the Schäfer method was applied. It is peculiarly suitable to children. In one case the method was pursued 30 minutes, and in the other case 40 minutes before breathing recommenced. Of course, the pressure needs to be proportionately gentle for children. The rescue was a combination of pluck, promptness, and skill, which deserve all praise.

To sum up, my experience so far shows it is applicable in every sort of case: to the young and the old, to both sexes, and the method fulfils all that Professor Schäfer claims for it.

NOTE.—A Clinical Lecture by a well-known teacher appears in each number of this journal. The lecture for next week will be by Professor Henri Huchard, M.D., Physician to the Paris Hospitals. Subject: "Digitalis and Digitaline: with Special Reference to their Uses and Modes of Administration."

## ORIGINAL PAPERS.

### A CLINICAL INQUIRY INTO THE USE OF "VACCA" MILK FOR BOTTLE-FED INFANTS AND FOR SICK CHILDREN.

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IN COLLABORATION WITH

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THE publication of this inquiry, to which reference was made in the *Lancet*, Vol. ii., 1908, p. 1742, was unavoidably delayed, but has not ceased to be opportune, if, as estimated by Dr. Arthur Newsholme in his recent work on "The Prevention of Tuberculosis," probably 20 per cent., of the milk supplied to large towns still contains living bacilli. In the City the tubercle-infected milk supply seems to have now reached a higher percentage than ever recorded before. And in a recent monthly report by Dr. Collingridge, Medical Officer of Health for the City of London, the following conclusions are drawn from Dr. Klein's

examination of 32 samples from the home counties: "15 per cent. had an appreciable amount of dirt; 40 per cent. had pathogenic bacteria; 43.5 could be classed as pure."

"Of the samples which had pathogenic bacteria, 12.5 per cent. produced in guinea-pigs definite tuberculosis with the typical tubercle bacilli (this being a jump from 7.7 per cent., the previous record). Of a number of guinea-pigs inoculated with the sediment from the samples one died with severe inflammation of the lungs and another with extensive pseudo-tuberculosis."

The bearing of these conditions upon the prevalence of infantile tuberculosis, and the duty not to allow any considerations of secondary importance to withhold the trial of a remedy for the evil both efficient and capable of immediate application, are the reasons which originally prompted this inquiry and which now justify its publication.

#### I.—SOME SPECIAL FEATURES OF "VACCA" MILK.

Any sound, rich milk, free from all adulteration, and which could be preserved indefinitely in the sterile state without losing its quality and freshness of taste, and which could be used in any season or climate, must claim attention in view of our persistent failure to provide for the infants of the poor an unvarying supply of absolutely reliable sterile milk of high nutritious value. The "Vacca" milk has proved to be of that description; and if the supply could be made as unlimited as the demand, since the local distribution in our great cities would be quite a simple matter, there would remain only to ascertain whether the milk bears out its claims in practice, and is found to be a satisfactory food for bottle-fed infants.

Strangely, though the verdict has been universally favourable as regards its general consumption, and in particular as regards its use on steamships and in the tropics (which seem to have hitherto absorbed the greater part of the supply), its clinical uses have not been much studied, and its nursery value does not seem to have been thought of until Dr. Bilderbeck Gommess brought the facts to my notice.

*As an Invalid's Milk.*—It had already been conclusively established by the investigations of Dr. Klein (a) and of eminent foreign bacteriologists, that the milk supplied under the name of "Vacca" was absolutely free from bacteria, and also from the addition of any preservatives; and yet capable of being kept indefinitely, ready for use at any time or in any climate, and without losing its flavour of fresh milk.

The writer's clinical experience of its use in adults had borne out the report that in spite of its rich quality it is singularly light of digestion and therefore suitable for invalids and particularly for exclusive milk diet cases, and also for cases of typhoid that is, during the stage of convalescence; for the Prideaux-Selby Treatment by Whey during the fever itself has been adopted by him, and by many others since the publication of Dr. Prideaux-Selby's remarkable observations. (b)

*As an Infant's Milk.*—As regards infants, the evidence was still wanting as to whether it might prove a dependable substitute for mother's milk, a point of great importance, seeing that any infants exclusively fed on this milk would be absolutely protected against the risk of any milk-borne infection. The facts carefully observed and recorded at the Belgrave Hospital for Children are a first instalment of that evidence, pending any further trials which it would be desirable to institute elsewhere on larger numbers.

There is no published account of the method adopted in the preparation and bottling; but the facts available and the claims advanced in favour of this milk are set forth in the pamphlet, entitled "The Vacca Company, Limited, Amsterdam, Holland—Milk sterilised without loss of freshness—Milk preserved indefinitely without the addition of any kind of preservative."

(a) *The Lancet*, Vol. i., 1902, p. 875.

(b) "Milk or Whey in Enteric Fever?" *The Lancet*, 1901. Vol. ii., p. 1182.

I. The vacuum in the neck of each bottle, recognised by the "water-hammer" test of succussion before opening, is a handy proof that no gaseous fermentation has occurred, and that the milk is presumably as sound as when it was bottled.

II. The absolute sterility of the milk was attested after searching examination by Dr. Klein, who also testified that:

III. The milk contains no germicides, as it proves to be an excellent medium for the cultures of bacillus coli and other micro-organisms. In the words of Dr. Klein's report: (a) "It follows that the milk is sterile, that it has no flavour of having been boiled, and that it contains no added substance that would inhibit the growth of microbes intentionally added. It must be clear from these results that the hitherto unsolved problem of having milk sterilised without boiling, and to retain the milk sterile without any preservative has, in these milk samples, been satisfactorily solved."

IV. It cannot, therefore, be allowed to stand open much longer than ordinary milk without undergoing decomposition. In other respects, too, the milk behaves like ordinary fresh milk. But it is found, and this is perhaps not unconnected with its special lightness of digestion, that the cream does not rise on standing, and that clotting does not occur so readily on the addition of rennet or other coagulants.

V. Documentary evidence as to the freshness of its taste is supplied in the following note, quoted from the same analytical report (*Lancet*, Vol. i., p. 675, 1902): "The condition of all the samples was satisfactory; the most remarkable feature being the entire absence of 'boiled' flavour. We could find no preservatives. The milk is retailed at 3d. per litre (that is, nearly an English quart). It is the first time that we have met with a sterilised milk giving absolutely no evidence to the taste of having undergone a sterilising process."

VI. The sterilising process is in itself a guarantee, and provides for freedom from infection; but in addition, the greatest care is stated to be used, under constant veterinary supervision, to exclude pollution in the milking sheds. The milk is originally clean milk.

VII. It is also stated that none but the absolutely fresh milk from the select herds is passed for treatment, and that it is bottled within a very short time after being drawn.

VIII. Lastly, the important statement should be mentioned that, as uniformity of excellence is the great aim, not only are the cows submitted to the closest scrutiny as to their milk-fitness, but no milk is bottled during the periods when change in feeding, &c., causes uncertainty in its quality. No "Vacca" milk is produced during the months of April and October.

Three main facts would seem to be established:—(1) That the milk is a good, rich, fresh-tasting milk, absolutely sterile and unadulterated; (2) that it can be preserved indefinitely; and (3) that each bottle can be satisfactorily tested as to the persistence of a vacuum by a sharp tap on the stopper before opening.

The distribution of a supply of good milk to any region and in quantities sufficient for any reasonable period of time is thus rendered possible. And this would imply that a practical solution is at hand for the problem how to ensure for the infants of the poor a never-failing and reliable supply. The all important question remains: Does it fulfil the clinical requirement for infants when put to the clinical test?

#### II.—THE CLINICAL OBSERVATIONS.

A first group of cases was studied in the winter and spring of 1908. The second and larger group in collaboration with Miss Edith Guest, M.B., B.S., during the period October, 1908, to March, 1909.

The points for investigation were the following questions:—

(a) Whether this milk was (1) acceptable to infants; and (2) easily digested.

(b) Whether it proved nutritious.

(c) Whether it was free from the drawbacks which

have sometimes attended the exclusive use of sterilised and pasteurised milk, and particularly from the production of any rachitic or scorbutic symptoms; and (d) Whether it was suitable in the various infantile disorders.

The answers to these questions are contained in the facts recorded in connection with the following cases:—

*Undiluted "Vacca" Feeding.*—It will be seen from the notes that several other infants, much younger than the following, were tried on undiluted "Vacca." Case 319, æt. 1 year 10 months; wasting; "Vacca," 10 oz. daily for 7 days; stools well digested, and the condition excellent. Case 275, æt. 1 year 9 months; bronchitis and rickets; "Vacca," 3 oz. three-hourly for 7 days; subsequently diluted with  $\frac{1}{2}$  water; the curds became very small, and the patient was discharged much improved. Case 335, æt. 2 years; bronchitis; did well; stools well digested. Case 259, æt. 1 year 3 months; "Vacca," 4 oz. three-hourly for 4 days; also bread and butter and milk pudding; some vomiting and curds in the stools resulted; "Vacca" was reduced to 3 oz.; no vomiting; the curds very small, and the stools no longer offensive; this was a good test case showing the digestibility of the milk in conditions of mixed feeding. Case 257, æt. 11 months; gastro-enteritis; "Vacca," 3 oz. three-hourly, increased in two days to 4 oz., and two days later to 5 oz.; two days later small curds began to be passed; the "Vacca" was next diluted with water ( $1\frac{1}{2}$  oz. water to the 5 oz.), the curds then disappearing. This was a good test case for the digestibility of the undiluted milk in large feeds.

*Mixed Feeding with "Vacca."*—Some infants of 2 years and under, suffering from broncho-pneumonia, gastro-enteritis, rickets, or wasting, were fed on bread and butter and milk pudding in addition. Far from the "Vacca" disagreeing, they all did well. Cases 363, æt. 6 months; 317, æt. 1 year 1 month; 259, æt. 1 year 3 months; 322, æt. 1 year 4 months; 275 and 284, æt. 1 year 9 months; 319, æt. 1 year 10 months 340 and 355, æt. 2 years.

*Exclusive Feeding with "Vacca" for  $3\frac{1}{2}$  months.*—Case 261, J.E., admitted September 10th, 1908, æt. 10 weeks, fed on milk and water and Allenbury's; much wasted from diarrhoea for 5 weeks past, was given for 10 days ordinary milk, 1 oz., water 2 oz., two-hourly. He gained weight slowly; but the stools were green and undigested. The following changes were then made: September 20th, peptonised milk, 1 oz.; rice water 2 oz., two-hourly; the stools remained loose and green. 20th: Undiluted "Vacca" 2 oz., two-hourly; the stools became firmer, but remained green. 28th: Vomited, and large curds were passed. Water (2 drs.) added; vomiting ceased till October 4th. Ordinary milk (diluted as before) was substituted for 2 days. 7th: Vomiting has continued. Given peptonised milk, 1 oz., water  $1\frac{1}{2}$  oz., two-hourly. 8th: Has continued to vomit. 9th: Exclusive "Vacca" feeding resumed (with  $\frac{1}{2}$  water). As he vomited again he was given quarter-hourly small feeds of  $\frac{1}{4}$  dr. "Vacca" with  $\frac{1}{4}$  dr. water. The vomiting stopped. 10th: "Vacca," 2 drs., water 2 drs., hourly. 12th: "Vacca," 3 drs., water 3 drs. hourly. Same night 1 oz. of each two-hourly. 13th: Vomited 3 times; ordered hourly feeds again. 17th: two-hourly feeds of 2 oz. (half and half). After 18th, no more vomiting. 20th: An extra  $\frac{1}{2}$  oz. "Vacca" added, although stools still slightly curdy. Gaining weight again. Nov. 3rd:  $2\frac{1}{2}$ -hourly, with  $\frac{1}{2}$  oz. water added. 9th: "Vacca" increased to 2 oz. (with water  $1\frac{1}{2}$  oz.); curds lessening. 20th: Further additions of  $\frac{1}{2}$  oz. "Vacca" and  $\frac{1}{2}$  oz. water, three-hourly; progressing steadily, trying to sit up. December 1st: Open air daily. 7th: "Vacca" 3 oz., water  $2\frac{1}{2}$  oz., three-hourly; small curds occasionally. 17th: Gaining weight, healthy, lively, and content. After sustained progress, discharged on January 7th, having taken no other food but "Vacca" for upwards of  $3\frac{1}{2}$  months, and no drugs except a little castor oil. He had developed no signs of rickets or scurvy. After the interval of indigestion, although the gain in weight

was slow, the gain in strength was steady, and the infant invariably bright and cheerful, being hardly known to have given any sign of pain or distress.

*Simple Constipation and its Consequences on the General Health.*—Two cases (337, æt. 1 year 1 month, and 296, æt. 3 years) were treated; both satisfactory. The first was breast-fed, and cow's milk was said to produce curdy stools and vomit. In the hospital, undiluted "Vacca" (4 oz. three-hourly) was given for two days; the stools less hard but contained small curds. For four days, 2 oz. barley-water added; as the stools were still a little hard, Ol. paraf.,  $\frac{1}{4}$  dr., was given six-hourly for three days, and the stools improved. Six days later, a diet of ordinary milk and barley water, and milk pudding was well taken; the stools (3 or 4 daily) yellow and less hard. Discharged well. No other medicine taken.

*Infantile Gastro-enteritis.*—Case 257, æt. 11 months. Was losing weight on peptonised milk. He gained 9 oz. in 10 days on "Vacca." Discharged well. Case 259, æt. 1 year 3 months. Stools offensive, containing much curd and mucus. Undiluted "Vacca" with a little pudding for 10 days; then "Vacca" 2 oz., barley water 1 oz.; in 3 days the stools were yellow, digested, and not offensive. Discharged well. Case 317, æt. 1 year 7 months. After 3 days on undiluted "Vacca," the stools were yellow, but still showed large curds and mucus. "Vacca" diluted with  $\frac{1}{2}$  water; the stools improved. After 2 weeks, stools nearly normal; no mucus. Discharged, having had no medicine. Case 322, æt. 1 year 3 months. Stools greenish, with mucus and curds. "Vacca" and water, of each 3 oz., three-hourly; in 8 days the stools were yellow and digested. Case 302, æt. 1 year 3 month. Died on fourth day after admission, having vomited persistently, though less sick on "Vacca." Case 311, æt. 3 years 9 months. Blood and mucus in stools. On "Vacca," improved steadily. Discharged well after 8 days.

*Gain in Weight in Cases Admitted for Wasting or Gastro-enteritis.*

Case.	Age.				
337	0 year 11 months.	In 19 days gained	21 oz.		
275	1 " 9 "	" 13 "	" 18 oz.		
319	1 " 10 "	" 7 "	" 10 oz.		
257	0 " 11 "	" 10 "	" 9 oz.		
322	1 " 4 "	" 12 "	" 30 oz.		
317	1 " 7 "	" 32 "	" 34 oz.		
284	1 " 9 "	" 3 "	" 3 oz.		
259	1 " 3 "	" 9 "	" 19 oz.		
285	0 " 9 "	" 26 "	" 22 oz.		
261	0 " 10 "	" 8 weeks "	" 26 oz.		

*Dyspepsia and Wasting from Unsuitable Milk and Foods.*—Case 319, æt. 1 year 10 months. Gained 10 oz. in a week on "Vacca" and milk pudding; was discharged well; stools digested and no longer offensive. Case 345, æt. 5 months; advanced emaciation; "Vacca" 6 oz., water 1 oz. were given, but the abdomen being much distended, whey was substituted; died on 4th day. J. A. M., æt. 2 months; the smaller of twins, breast-fed, had been "wasting" for 4 days with vomiting and diarrhoea; on February 25th, tried the day on undiluted "Vacca" (1½ oz. every 2½ hours); slight vomiting twice, stools as before; on 27th, 6 feeds of undiluted "Vacca," as before; no vomiting, but stools not so good. Not given a dilution of "Vacca," which probably would have agreed, but again diluted peptonised milk. Charles C., æt. 3 months; admitted February 20th, 1908; breast-fed for 2 weeks, afterwards on milk and water; wasting for 6 weeks, vomiting nearly all food after quarter of an hour, with curdy clots; motions constipated, hard and curdy; peptonised milk and water digested fairly well; tried with 4 feeds of undiluted "Vacca" (2 oz., 2½ hourly); not digested perhaps quite so well, but no digestive upset or vomiting. Minnie M., æt. 1 year 6 months; admitted December 23rd, 1907; "spinal caries"; stools "very bad" on milk diet; undiluted "Vacca" milk (5 oz. two-hourly) for 2 days; the motions improved and there was no vomiting.

*Dyspepsia and Dyspnoea.*—W. E., æt. 9 months; admitted March 25th, 1908; severe prostration from

"broncho-pneumonia and dyspnoea"; originally healthy, breast-fed for 3 months, afterwards frail and puny on nursery biscuits and boiled bread and milk. Whilst in hospital (2½ months) cut his 5th and 6th teeth. Frequency and shallowness of breathing, with distended thorax and with rales persisted, although after the first two days the temperature sank below normal, remaining quite low throughout, with rare exceptions. *Treatment:* April 3rd: Still purplish, passive and helpless; to be raised on pillows and to wear the terebene bib and the abdominal elastic belt. 24th: To use the "baby rest." *Diet:* April 21st: Stop previous mixed diet; undiluted "Vacca" only: (5 oz., three-hourly). At first some abdominal distension, which passed away, although the feeds were increased on the 27th to 6 oz. Good progress, but slight loss of weight; a little corn flour allowed again. A good deal of bronchial rale and wheezing still audible on 27th, but active abdominal and thoracic movement had resulted. May 11th: Still wears the belt; good depth and frequency of breath, with abundant air entry, and a coarse and loud respiratory murmur. June 10th: Has been taking solid diet; discharged much improved.

These cases illustrate the toleration for undiluted "Vacca" in delicate infants with irritable mucous membrane.

*Rickets.*—Case 284, æt. 1 year 9 months; bronchitis, marked rickety skeletal changes, but no intestinal disturbance; greatly improved on undiluted "Vacca" for 8 days. Case 241, Florrie V., æt. 2 years 3 months; admitted August 27th, 1908; emaciated, very ill and anæmic; diarrhoea and vomiting for last 12 months; breast-fed for 2½ months, then on cow's milk and barley water; has never walked or talked; pigeon breast, beaded ribs, enlarged epiphyses, but has her 8 incisors; hands, limp and almost powerless; dorso-lumbar curve in sitting; abdomen, large and doughy; liver an inch below costal margin in the mid-clavicular line; 4 stools daily, large, very loose, and pultaceous, with small curds. *Diet:* On admission, ordinary milk. September 15th: Bread and milk and milk pudding; within 14 days, meat or fish, and an egg were allowed; looking less anæmic, but abdomen no less. 22nd: Half-a-pint "Vacca" substituted for ordinary milk, with solids as before. Abdomen became less tense, and patient less helpless and listless. Stools not smaller or fewer, offensive, with some mucus and curds. Abdomen still measuring  $\frac{1}{2}$  in. more than on admission. 27th: Given a mixture of charcoal and paraffin oil. 28th: Stools less bulky and offensive, no curds; colour blackish grey. 29th: Abdomen decreased by  $\frac{1}{2}$  in. October 2nd: As there was no further decrease, the meat, egg, and fish were cut off; the diet to consist of undiluted "Vacca," 1½ pints, dry crust, or thin toast and treacle. 8th: As stools, though less frequent, were still large, loose and curdy, the "Vacca" was diluted with  $\frac{1}{2}$  water. Stools still loose, but curds very small, and patient steadily gaining weight. 20th: Dilution decreased, 5 parts milk to 1 water. November 1st: Egg added; patient began to lose weight and appetite for three weeks, whilst cutting her canines. The stools were still pultaceous, with small curds, but not offensive, and only 3 in 24 hours. 20th: Patient out in open air for several hours daily. 28th: Gravy and potatoes added to diet; steady gain in strength. December 12th: Stools formed and no curds; improvement uninterrupted; looking healthy and vigorous, but is still deficient in walking and talking, though improving in both ways.

*Cases of Acute Affections in which "Vacca" Milk was the Diet.*

A. *Acute Lobar Pneumonia.*—Case 358, æt. 4 years 2 months; took whey for 2 days; then "Vacca" with one-fifth water instead; this was well digested in spite of pyrexia (103°).

B. *Broncho-pneumonia.*—Case 320, æt. 3; undiluted "Vacca" was well taken and well digested. Case 266, æt. 2 years 11 months; "Vacca" taken with light solid food, and well digested. Case 340, æt. 2; it was diluted with  $\frac{1}{2}$  water; the previous



vomiting improved, and the stools became digested. Case 363, æt. 6 months, and Case 354, æt. 3 months. Both took "Vacca" with  $\frac{1}{2}$  of water; there was good progress, and well-digested stools.

C. *Bronchitis*.—Case 298, æt. 2 years 11 months. This patient was vomiting on milk and lime water. Undiluted "Vacca" was given; the vomiting lessened, but continued slightly for 6 days;  $\frac{1}{2}$  water was then added and the vomiting ceased. Case 335, æt. 2 years; undiluted "Vacca" was well taken with light solids; no vomiting. Case 275, æt. 1 year 9 months; the stools were green and curdy; undiluted "Vacca" was given for one week, and the stools improved; a dilution with  $\frac{1}{2}$  water was then substituted, and the stools became more digested. All these patients did well. The diet was "Vacca" exclusively, except in three infants who had some light solids also.

D. *Acute Posterior Basic Meningitis*.—Lily S., æt. 8 months, was admitted March 9th, with constant vomiting. "Vacca" was tried first undiluted, then in dilution, but failed to control the vomiting. Treatment proved unavailing (including lumbar puncture and serum injections). She died on April 9th.

E. *Empyema*.—Horace B., æt. 3 years, admitted January 22nd, 1908. One feed of 7 oz. undiluted "Vacca" was given and agreed.

F. *Double Mitral Disease with Pericarditis*.—Case 301, æt. 6 years 2 months. There was much vomiting, with curds. Under "Vacca," some vomiting continued for 2 weeks, but the curds were less, and the patient was soon discharged in good condition.

G. *Nephritis*.—Case 286, æt. 7 years. This patient had obstinate vomiting with curds on ordinary milk. Undiluted "Vacca" was given; the vomiting decreased and ceased after 6 days and the curds became fewer. Case 305, æt. 2 years. This child was given the dilution 1 to 1, and digested it well.

#### REMARKS.

1. *The Effect upon the Appetite*.—In all the infants the "Vacca" was welcomed from the first, even when the ordinary milk had been taken without relish, and it continued to be taken with great readiness. In one case there was falling off in the appetite both for "Vacca" and for other food, but this occurred in coincidence with the cutting of two canines, and after a prolonged residence in the ward. Open air was prescribed in this case as well as in another infant, whose appetite showed signs of flagging, with excellent results in both instances.

2. *The Effect upon the Digestion* was good in all cases. It may be said of all of them that eventually there was an improvement in the digestion for ordinary milk as a result of a course of "Vacca" milk. A good instance in point is that of No. 337, æt. 11 months, in whom cow's milk caused green and curdy stools. "Vacca" (4 oz.), barley water (2 oz.), three-hourly, were well digested for five days. After this cow's milk (4 oz.), barley water (2 oz.), were well taken and digested.

The chief evidence as to the digestion is to be found in the vomit (if any) and in the stools. The latter showed undoubted improvement. As regards vomiting, putting aside cases such as meningitis, where it was due to cerebral causes, and the terminal stages of fatal gastro-enteritis, vomiting was practically unknown to occur when the rich bottled milk was suitably diluted. In only one instance did vomiting originate under "Vacca" diet. Although only 10 weeks old, and unable to get on with the ordinary milk considerably diluted, this infant succeeded in retaining for 3 days three-hourly feeds of undiluted "Vacca." This tolerance was, however, only temporary; curds increased in the motions, and on the fourth day he vomited the feed. After substitution of ordinary milk, much diluted, and subsequently of peptonised milk, the vomiting did not cease until "Vacca" was again administered in teaspoonful feeds every  $\frac{1}{2}$  hour, gradually returning to the usual intervals and amounts.

#### III.—GENERAL CONCLUSIONS.

I.—The importance of our inquiry lies in the fact

that we are offered advantages hitherto unattainable, viz. :—

(1) A certainty of excellence in quality and of freedom from fermentation. This evidence can be obtained in the case of each bottle by inspection, and by the succussion-test before opening.

(2) The facility for an unfailingly continuous supply of this best quality, day by day, since a sufficient store can be laid in and will keep fresh for any period, so as to guard against every emergency.

(3) The avoidance of the constantly-recurring so-called "accidental" variations in the composition and quality of the highly-promiscuous milk which is retailed, particularly to the poor.

(4) The avoidance (rendered possible for the first time by the stored supply) of the seasonal variations and alimentary variations in the quality of the milk, the milk produced during the less favourable periods being excluded. Under our ordinary system of daily supply, this unevenness of quality is, of course, unavoidable, even in the case of first-class herds. With this milk, as an almost identical quality can be procured indefinitely, if an infant be well suited by the trial sample, the bottle feeding question would be solved for that infant. And if practically all infants were found to be suited, then the infant feeding problem itself would have found its solution.

II.—*The Clinical Results*. (1) Individual toleration for the "Vacca" milk appears to be the individual rule in infants.

(2) Its acceptability is also the rule with infants.

(3) Its digestibility is proved by the following facts to be greater than that of the ordinary milk.

(4) Its substitution sometimes suffices, without any other help, to cure the dyspepsia due to ordinary milk.

(5) It can be administered *neat* to some infants without detriment; but in most of them a slight dilution will suffice where ordinary milk had to be much further diluted.

(6) The improvement in the character of the stools is a proof of its better digestion.

(7) Its exclusive administration to infants for prolonged periods, so far as it has been tried, has not led to any symptoms suggestive of scurvy or of rickets, nor to any other morbid symptoms.

(8) Infants fed upon it exclusively have improved in health, in strength, and in weight.

(9) Increase in weight has perhaps been less considerable than the increasing strength—possibly, in part, by reason of the greater muscular activity evinced.

(10) Although the "Vacca" fed infants have not run to fat their general nutrition has been very good.

(11) In conclusion: As the results of our clinical observations have been highly encouraging, it is most desirable that the inquiry should be taken up by other observers on a much larger scale, to test more thoroughly the question as to the genuineness of the claim of this milk to be the much needed *reliable infants milk*, particularly for the poor.

## SPINAL ANÆSTHESIA IN SURGERY. (a)

By VIVIAN ORR, M.B., B.S.,

Anæsthetist to Westminster Hospital.

THE induction of anæsthesia by the intra-spinal injection of certain drugs, of which cocaine is the pioneer and type, is a comparatively recent event, and one which has naturally excited a general interest amongst our profession and the public.

The surgeon is delighted with the ideal conditions for operating which the muscular relaxation affords, and he vividly remembers his last case of prostatectomy in a stuffy theatre on an old bronchitic patient with calcareous arteries and rigid recti. Add to this that the prostate was small, hard and adherent, and that the breathing made the

(a) Paper read before the Annual Meeting of the Chelsea Clinical Society, May 16th, 1909.

anæsthetist look careworn. Is it then to be wondered at if the surgeon is predisposed to favour the innovation which remedies all this? The layman, too, reads the "ha'penny press," and naturally, when anything operable crops up in his family, such as a baby arriving or a tooth beginning to ache, asks for some of that new "Daily Something" stuff that "puts you to sleep without taking away your senses"; while the early impression of the anæsthetist is that the newcomer is analogous to the taxicab come to oust the horse-drawn vehicle from the streets, and he thinks of eliciting the sympathies of a great ex-politician or the editor of a "Daily Something."

It is proposed to discuss these standpoints of surgeon, patient and anæsthetist, and, with the assistance of the members present, to try and arrive at the correct attitude to be taken up in relation to spinal injections in surgery. It is impossible to indicate in a short paper all the points in a subject like spinal anæsthesia, which now has an immense literature. The use of lumbar puncture to relieve the pressure in hydrocephalus, or for therapeutic or diagnostic purposes, is outside the scope of the paper, but there is a close connection between all these practices in details of *technique*, symptoms and dangers.

Spinal anæsthesia has been described as a link between local and general anæsthesia. It goes a step farther than local anæsthesia, and perhaps you will agree that up to now it does not attain to the giddy heights of skilfully-conducted general anæsthesia. That it is going to make a niche for itself in the anæsthetist's already bulging bag, I have every confidence. The fact that several substances have been employed, and are still employed, and that each has its warm advocates, that the method of solution and injection, that the posture of the patient, and even the after-treatment, are matters on which different authorities differ, is significant. This state of instability and uncertainty is tantamount to a confession of ignorance and an admission that the stage of experiment and trial has not been yet left behind.

Cocaine was the first drug used for this work, and it is interesting, historically, to learn that an American was the first man to experiment with it. Leonard Corning, in 1885, injected cocaine into the spinal cord, and suggested its use for intraspinal anæsthesia in surgery. But, as in the case of so many great discoveries, their true value is not generally recognised for years, and it was only in 1899 that Tuffier, in Paris, and Bier, in Germany, made practical use of Corning's suggestion. Tuffier first injected cocaine into the lumbar sac to relieve the pain of an osteo-sarcoma of the pelvis, and the success of this induced him to make use of the method for surgical operations.

Bier had the pluck to have himself injected with cocaine, and suffered from a bad headache as a result, and even as late as 1901 he described the treatment as being in its infancy, its *technique* faulty and dangerous, and the effects disagreeable and not to be recommended.

Next came the introduction of synthetic drugs, which aimed at eliminating the toxic factors in cocaine, while maintaining or increasing its anæsthetic value.

The *desiderata* in a synthetic cocaine are, in addition, solubility in water, stability and sterilisability; harmlessness to the tissues, no irritation, inflammation or necrosis, and rapid action.

Experiments and clinical work have eliminated many drugs as inefficient or dangerous, while retaining those known as stovaine, tropacocain and novocain; and a remarkable paper by Chaput, of

Paris, extols the virtues of a mixture of stovaine with cocaine, to which I will refer again.

The addition of adrenal preparations to increase the anæsthetic action has been found dangerous and is hardly, if ever, employed now.

The method of solution and the dosage is evidently not yet generally agreed upon.

That the medium should be isotonic with the cerebro-spinal fluid, and that the specific gravity of the solution should be greater than that of the cerebro-spinal fluid, are points on which emphasis is laid in some quarters, the intention being to have a rapid absorption over a localised area of nerve roots. The actual amount of actual fluid injected is an important factor in regulating the height of the anæsthesia, apart from the amount of drug, but posture and movement must have some influence in this respect, in addition to the dose of the drug employed.

As usually given, the dose, from 0.04 to 0.06 grm., is enclosed, ready sterilised for injection, in a glass ampoule dissolved in an unirritating fluid. If these ampoules are obtained from a reliable source they are a great convenience. One practical point, though, is, that the contained dose should be clearly indicated. Neglect of this has led to a fatal result.

The syringe must be sterilisable, and the needle and cannula strong and long enough to enter the sub-arachnoid space in a fat muscular adult 3 inches to 4 inches, that is, well over the average depth, which is 2½ inches to 3 inches. The patient's skin must be sterilised with the usual fluids, and kept covered as far as possible during the puncture and after.

The puncture is usually made in the sitting posture, with the patient's back arched as much as possible so as to show up the landmarks and widen the interval between the spines and laminæ. The lateral posture is the other alternative; it is more difficult to enter the canal in this position, but the condition of the patient often renders it necessary. Some opinions as to the value of spraying the site of puncture with ethyl chloride I should like to have. Having had a recent experience of its effect on a poisoned finger, I can only think that it is adding insult to injury.

But a most important factor in the whole conduct of these cases is the obtaining the confidence of the patient. A man must be told beforehand what he has to expect, or he will suffer himself and give trouble to the surgeon. In a hospital where many cases are being done there is very little trouble in this respect. The patients tell one another, and it is the exception for a patient who has once had general and once spinal anæsthesia not to greatly prefer the latter. It requires some little experience to tap the cerebro-spinal fluid with accuracy and certainty, and every now and then there comes a spine that refuses to be disturbed; no amount of prodding will induce the fluid to flow in drops or steady stream through the cannula. Then is the time for the anæsthetist—like cabby picking up the passenger from the silent, motionless motor—then is his time. There are other factors of uncertainty, as to extent and duration of the anæsthesia, even in the most skilled hands, which have made the use of a general anæsthetic compulsory—bent and broken needles, blood, etc. But in a typical case, having allowed 5-10 c.c. of the fluid to flow from the cannula, to obviate risk of headache, attach the syringe and inject the fluid slowly. Remove the needle, and, covering the puncture area in case a second injection has to be made, place the patient on his back with head and hips raised. In most cases the puncture is made in the second or third lumbar interspace. Where the first is chosen, care

must be taken not to wound the cord. Even in those cases where high anæsthesia of the upper extremity and head is aimed at, the site of injection remains in the lumbar region.

**Onset.**—The onset of anæsthesia is rapid—in 1½ to 2 minutes. There is loss of sensation to pain in the perinæum and scrotum, and some heaviness in the limbs: rapid loss of knee-jerks. Tactile, thermal and localising sensations are at first retained. Within the second minute the Achilles tendon reflex disappears, and rapidly the anæsthesia spreads to the umbilicus, rib margin or transverse nipple line. In from 5 to 7 minutes there is muscular as well as sensory paralysis, though the power of telling the position of the limbs may be but little affected. Of the deeper structures, those innervated by the sacral nerve roots are analgesic, but it is more unusual to get a good anæsthesia of the scrotum and spermatic cord, which are supplied by the first lumbar segment; and the same holds for the peritoneum, with its vagal, phrenic and sympathetic supplies. Pain and discomfort are common in those cases where the spermatic cord or mesenteries are under manipulation.

The duration varies largely, and herein lies one of the disadvantages of the method, but, as a rule, an available anæsthesia of from 45 to 60 minutes can be counted on.

The return of sensation is more slow than the disappearance, and takes place in the reverse order; first motion, then sensation, and then reflex action reappearing (time, 1½ to 3 hours after injection).

In the majority of cases the pulse and respiration are not affected as the anæsthesia is asserting itself, but there have been several cases in my experience which have shown symptoms of collapse, pallor, feeble, rapid pulse, cold sweats, and great mental anxiety, this occurring about 8 to 10 minutes after the injection and soon after the commencement of the operation. The explanation may be a psychic or toxic one, or the relaxation of the abdominal muscles may permit of so much blood being retained in the splanchnic area as to induce a condition of cerebral anæmia.

Whatever the cause, the condition is only temporary and relieved by brandy or caffeine, but in an already enfeebled patient this temporary collapsed condition might prove the last straw. The Trendelenburg position is stated to relieve this anæmia, also oxygen. The preliminary use of a sedative, such as morphia and scopolamine, is strongly advocated by some in nervous patients (e.g., morphia, ¼ grain given half an hour before the operation), and it is a routine practice either to bandage the patient's eyes or have a screen placed so that he cannot see the operation. Some cotton-wool in the ears, too, often saves the patient from hearing an incautious or peculiarly emphatic expression. Some patients smoke during the operation, and it is best to keep their attention fixed away from the scene of bloodshed. It has been my lot to while away some lengthy hours in a futile endeavour to interest a labourer on current topics; even a quarter of an hour seems to them interminable under the circumstances. It is at times like these that one almost wishes to be a surgeon, or has a lurking hope that the subject will begin to groan and give poor cabby a chance.

It is best, when beginning the operation, to avoid asking the patient if he feels anything. Test the anæsthesia with a pair of forceps, but do not risk losing his confidence.

The contra-indications to the employment of spinal anæsthesia, as enumerated by Chaput, are: (1) In arterio-sclerosis and advanced cardiac disease; (2) in old and feeble patients over 65 liable to

syncope after its use, and apoplexy; (3) in cachectic states, grave anæmias, infective states, albuminuria, diabetes, syphilis and diseases of the nervous system. But he believes that general anæsthesia in these conditions is still more dangerous.

Septic or diseased conditions of the skin over the lumbar spines have prevented lumbar puncture, while in some malformed spines and osteoarthritic cases it has been found impossible to enter the sac. In long and complicated operations, where the conditions to be dealt with are not known beforehand, there is risk of the analgesia proving inefficient.

Barker reports two fatal cases occurring in patients suffering from abdominal malignant disease involving much manipulation of viscera, but whether the anæsthetic agent was responsible for the disasters or not is, in such grave cases, open to doubt. The opinion of many authorities seems to be that lumbar anæsthesia should be limited to operations below the umbilicus.

Chaput, of Paris, wrote an interesting and striking paper last year, giving the results of a series of cases in which he operated on the thorax, upper extremities and neck. He used a mixture of stovaine and cocaine, and gave a preliminary injection of morphia and scopolamine hypodermically. I was sufficiently impressed with his paper to go and see him personally last week, only to find that, on further trial, he had abandoned this method, and had since October last adopted novocaine with enthusiasm and success, while drawing a line round the body at the umbilicus and confining his operations to the regions below.

I may add that in the cases which I saw him do—a resection of a piece of the tenth rib and a fixation of a retained testis—the patients, both nervous men, seemed to suffer considerable pain, and both exhibited symptoms of collapse.

On the other hand, one of Mr. McGavin's cases at Greenwich exemplifies the value of this method. The patient was a seaman who had an aortic aneurysm, and the operation was for a recurrent popliteal aneurysm, which was dissected out. During the hour that the procedure lasted the patient was quite unaffected, talking and smoking unconcernedly, and his subsequent history was quite uneventful.

In cases of bad compound fractures of the lower limbs it is remarkable how the shock of the injury is alleviated by the cessation of stimuli passing up the cord, as is the subsequent shock of the manipulations or amputation.

Many successful operations for prostatectomy have been performed, the relaxation of the recti allowing of unimpeded access to the gland, and, in addition, since these patients are often subjects of heart, lung and kidney disease, the advantages of spinal over general anæsthesia are considerable.

For operations on the lower limbs, scrotum, perinæum and inguinal regions, where local anæsthesia is not available, spinal anæsthesia offers an alternative to general anæsthesia.

The choice will be influenced by several considerations. Many patients have such a dread of a complete loss of consciousness that they will cagerly grasp any alternative offered. And in favour of spinal against general anæsthesia can be urged a comparative absence of the unpleasant after-effects of ether and chloroform, the lessened risk in cases of grave visceral disease, the impossibility of the occurrence of the late toxic effects of ether and chloroform, the abolition of shock, and the relaxation of the muscular system. While, as counsel for general anæsthesia, one can urge the



advantage of the absence of the psychic effect of the patient's consciousness both on himself and the surgeon, the uncertainty of spinal anæsthesia, both in point of duration, adequacy and extent, and, finally, the absence of any risk of a septic meningitis or a paresis or paralysis of temporary or permanent character, vomiting and headache. As I mentioned at the beginning of this paper, the amount of work done, and being done, in connection with my subject is very large, and it is being done all over the world under all sorts of conditions—in the Services and the back-blocks, as well as in the great city hospitals—and many a man working single-handed has to thank spinal anæsthesia for enabling him to perform operations and save lives, which under the old conditions would have been beyond his powers, or, at any rate, have taxed them to the utmost.

But at present, in my opinion, the statistics are not complete enough, nor are the indications or *technique* sufficiently clearly defined to enable us to assign to spinal anæsthesia its proper place in surgery.

## OPERATING THEATRES.

### CHILDREN'S HOSPITAL, GREAT ORMOND STREET.

OPERATION FOR ACUTE ABDOMINAL SYMPTOMS DUE TO A CASEOUS GLAND IN THE MESENTERY.—MR. EDRED M. CORNER operated on a girl, æt. 11, who had been admitted with a history of three days' illness, accompanied by sickness, abdominal pain, and inactivity of the bowels. On admission the temperature was normal, and the pulse about 120. On examination the abdomen did not move well on respiration; it was rigid, tender all over to both palpation and percussion. Rectal examination revealed general tenderness. In the great majority of cases, Mr. Corner said, a child presenting such symptoms is suffering from appendicitis. The next most common cause is associated with the presence of Meckel's diverticulum. In this case, he pointed out, there is a combination of peritonitis and intestinal obstruction due to mechanical causes. There is a somewhat similar condition when appendicitis is present, the intestinal obstruction being caused by paralysis of segments of the bowel. The presence of Meckel's diverticulum in cases where it gives rise to clinical symptoms almost always presents some abnormality of the umbilicus; this may be found in a protruding, retracted, or displaced umbilical scar. No such abnormality was present in this particular case, so that it was thought that Meckel's diverticulum was not present. The absence of pyrexia, the irregularity of the sickness, and the inactivity of the bowels also suggested that appendicitis was not present.

An enema was administered by means of a tube and a funnel, and returned with no result either in *fæces* or *flatus*. Hence it was apparent that some intestinal obstruction was present. Under such circumstances, the abdomen was opened at once, the incision being made through the right rectus. The fibres of the rectus muscle were separated, and the abdomen opened in the ordinary way. The cæcum was delivered, and the appendix found to be normal. No greatly distended or collapsed bowel was seen, such as would indicate the presence of a formation causing intestinal obstruction, but in the mesentery of the small intestine a mass was discovered the size of a billiard ball and soft in consistence. Gauze was packed around so as to shut off the peritoneal cavity in the vicinity of the mass in the mesentery from the rest of the peritoneum. The mesenteric mass was then raised to the surface of the abdomen; in doing this the mass ruptured, and pulsatous material escaped. All such material was carefully wiped away and the rent enlarged in the direction of the axis of the mesentery. The interior of the mass was then thoroughly but gently curetted so as to avoid any risk of injury to the mesenteric vein. Mr. Corner remarked that he had had the importance of this thrust upon him recently by losing a somewhat similar case

from secondary hæmorrhage into the cavity of a tuberculous abscess a few days after operation, the hæmorrhage taking place from a mesenteric vein into the abscess cavity and bursting between the stitches, spread into the general peritoneal cavity, necessitating a second operation, from the shock of which the patient died. After having carefully curetted the interior of the mesenteric abscess, Mr. Corner sutured the walls in such a manner as to fold them and largely obliterate the cavity of the abscess when the stitches were tied. Silk stitches on curved round needles were used, and care was taken not to injure any of the branches of the mesenteric vessels. The region was then thoroughly doused with sterilised saline solution, the plugs removed, and the abdomen closed without drainage in the ordinary way.

Mr. Corner now said that he had operated on quite a dozen similar cases. They were like each other in presenting a fairly healthy child with an abdominal tumour which had been discovered by accident, and which was smooth and lobulated in outline, and freely movable. Such tumours, it was found, were commonly regarded as being a faecal accumulation and treated accordingly without any effect on the tumour. It is needless to point out, he thought, that such delay militates against the chance surgery has in obtaining good results, for, next to tuberculosis of the bronchial glands, tuberculosis of the mesenteric glands is the most common cause of general tuberculosis. The presence of this abdominal tumour is at times associated with some looseness of the bowels, with blood and mucus in the stools, or, instead of this being present, there may be a history of its occurrence previously. Cases of tuberculosis of the mesenteric glands, with a palpable abdominal tumour, should be treated by operation without delay. Mr. Corner added that he had lost two cases, one from tuberculous meningitis a few days after operation, the disease really being present before the operation; and the second case from hæmorrhage from a mesenteric vein a few days after operation, as he had mentioned above. Some of these cases had been followed for five to six years after operation, and it had been found that great physical improvement followed in almost every one.

The patient made an uninterrupted recovery, and left the hospital after a fortnight.

## TRANSACTIONS OF SOCIETIES.

### CHELSEA CLINICAL SOCIETY.

ANNUAL MEETING, HELD MAY 16TH, 1909.

The President, Mr. A. F. PENNY, F.R.C.S.I., in the Chair.

MR. LEONARD A. BIDWELL, F.R.C.S., was elected President for the ensuing session.

Dr. VIVIAN ORR read a paper on

#### SPINAL ANÆSTHESIA IN SURGERY,

which will be found on page 12 of the present issue.

Mr. J. D. MORTIMER agreed that at present the method should be reserved for cases in which a general anæsthetic was clearly inadvisable. It answered very well in suprapubic prostatectomy, there being absence of disturbance on distending the bladder, of muscular spasm, and of shock. He was using 5 c.c. of a 2 per cent. solution of novocain and mannitol. He did not freeze the skin, but used the point of a knife for its puncture. Much attention to details was needed for success.

Dr. HILLIARD gave some particulars about the *technique* of the operation, and insisted on the importance of abstracting some of the cerebro-spinal fluid. He also spoke of the presence of shock in certain cases.

Mr. J. HOWELL EVANS also spoke of shock and collapse, and considered it important to ascertain whether these symptoms were due to over-manipulation by the surgeon, or to an overdose by the anæsthetist.

Dr. DRYSDALE inquired as to the results when cocaine alone was employed, and Dr. ROBINSON asked for information as to the mortality statistics.

Dr. ORR replied.

## CORRESPONDENCE.

FROM OUR SPECIAL CORRESPONDENTS  
ABROAD.

## FRANCE.

Paris, July 4th, 1909.

## CONSUMPTION—TREATMENT OF SYMPTOMS.

FOR the different complications of pulmonary phthisis, the medical attendant, says Prof. Robin, should have a large therapeutical arsenal.

*Cough.*—The cough in consumptive patients may be due to multiple causes but, generally speaking, the patient should not cough except to expectorate. He should endeavour to control his cough, as resistance to the desire of coughing is one of the best means of diminishing it, yet in certain cases medicines are useful.

Nervous cough will be treated at first by self-control, then by bromide of potassium, if necessary.

Bromide of potassium, 1 dr.

Cherry laurel water, 2 dr.

Syrup of ether, 1 oz.

Elderflower water, 4 ozs.

Three or four tablepoonsful a day.

When the cough is due to simple irritation of the larynx, gargles will be found useful:—

Naphthol B., 3 grs.

Perborate of soda, 4 drs.

Tincture of aconite, 15 drops.

Peppermint water, 6 ozs.

Boiled water, 34 ozs.

If this treatment does not succeed, the back of the throat may be painted with:—

Hydroch. of cocaine, 5 grs.

Water, 3 ozs.

or

Resorcin, 15 grs.

Cocaine, 2 grs.

Glycerine, 1 oz.

Where the cough is evidently due to irritation of the larynx, hot compresses might be placed to the front of the neck and the parts sprayed with:—

Coca leaves, 1 dr.

Boiling water, 10 ozs.

Carbonate of potash, 1 dr.

Essence of peppermint, 5 drops.

Or inhalations of hot water, to which are added a few drops of eucalyptol or gomenol.

If the above means do not succeed, the following might be tried:—

Tincture of aconite, 15 drops.

Tincture of belladonna, 12 drops.

Tincture of bryony, 12 drops.

Bromide of potassium, 1 dr.

Elder flower water, 6 ozs.

Four or five tablepoonsful in the twenty-four hours.

Tuberculous laryngitis is best treated by a specialist, as it requires an expert hand.

Another cause of the cough lies in difficulty of expectoration, and here expectorants are naturally indicated, the most simple of which are effervescent drinks as seltzer water or the inhalation of aromatic vapours:—

Tincture of benzoin, 1 dr.

Glycerine, 5 drs.

Water, 3 ozs.

and

Dover's powder }  
Terpine } 1 gr.  
Tolu }

For one pill, five or six in the twenty-four hours.

Another kind of cough is the gastric cough, known since the time of Hippocrates, and characterised by being dry, short and coming on after meals. It is dangerous, for it may be followed by hæmoptysis and vomiting; several remedies should be used in turn, if necessary, against it. The patient should first be put on a lacto-vegetarian diet: a few minutes before the repast, five or six drops of laudanum in a little water; after the repast, four to six drops of dionine in cherry laurel water:—

Dionine, 3 grs.

Cherry laurel water, 2 drs.

When the cough comes on half-an-hour after meals:

Cocaine, 1 gr.

Codeine, 1 gr.

Lime water, 6 ozs.

Chloroform water, 1 oz.

Where the cough is of bronchial or pulmonary origin, recourse might be had to inhalations of medicated vapours, while the secretion will be reduced by opium and datura:—

Extract of opium, 1-5 gr.

Extract of datura, 1-10 gr.

For one pill; three pills at an interval of half-an hour between each.

Dry cupping, mustard application, actual cautery, small blisters might be tried in turn.

There exists another drug, little known, and yet very useful; it is orthoformiate of ethyl; it is given at the dose of 10 drops on a lump of sugar and renewed every hour or two.

*Hæmoptysis.*—Hæmoptysis has always a considerable moral effect. It frightens both the patient and his family, who require to be reassured. The possibility of a return of the accident should be frankly stated in order that the means prescribed to avoid a recurrence of the hæmorrhage should be seriously observed.

The patient should avoid all effort as well as animated conversation, throwing his arms about, staying up late; the temperature of the room should not exceed 65° F.; in walking out of doors the patient should avoid the sun's rays. Everything exciting in the food must be suppressed, while milk must be the only drink allowed.

Such drugs as creosote and every form of arsenic, organic or mineral, will also be suspended if the patient had been undergoing this treatment.

Remedies against hæmoptysis, when it appears, are not wanting. Applications of mustard to the legs (not the thorax) and a mustard foot-bath when possible; ether spray down the spinal column frequently succeeds in arresting the hæmorrhage. In the meanwhile, the following two mixtures will be prepared:—

Ergotine, 1 dr.

Gallic acid, 10 grs.

Syrup of turpentine, 1 oz.

Water, 4 ozs.

A tablespoonful every hour.

Chloride of calcium, 1 dr.

Syrup of opium, 1 oz.

Water, 4 ozs.

A tablespoonful every hour, beginning at the half-hour.

If the hæmoptysis persists in spite of the above, a subcutaneous injection of gelatine might be made:—

Gelatine (sterilised), 5 drs.

Chloride of sodium, 2 drs.

Boiled water, 1 quart.

Five drachms will be injected once or twice a day.

The following pills might also be prescribed, if necessary:—

Hippo, 1 gr.

Powdered digitalis, 1 gr.

Extract of opium,  $\frac{1}{4}$  gr.

Or one pill; five to six daily.

*Dyspnœa.*—Dyspnœa will be treated by rest and immobility. When it does not yield, ten drops of validol or valerianate of menthol on a lump of sugar may be prescribed every two hours, or oxycamphor in alcoholic solution, at 50 per cent, at the same dose, or again the fluid extract of euphorbium pilulifera in five-drop doses, five or six time a day.

*Fever.*—The fever due to tuberculosis should rarely be treated, for the antithermic drugs that might be prescribed fatigue the stomach. It should consequently be left alone, except under the following circumstances:—

1.—When it is intense and really injurious to the patient.

2.—When the attacks come on at meal-time, hindering the patient from taking sufficient food.

3.—When the patient worries over it and expects to be relieved.

A good method is cold sponging; it frequently succeeds.

Among the antipyretics, four only should be employed: antipyrine, pyramidon, cryogenine, aspirine. The first-named should be rarely given. The following wafers are preferable:—

Pyramidon, 2 grs.

Cryogenine, 2 grs.

Caffein,  $\frac{1}{2}$  gr.

They should never be given at the moment of the fever, but at eight in the morning and nine in the evening.

**Sweats.**—Sweating weakens the patient greatly and hinders sleep; it should therefore be treated, and for this purpose several drugs are at our disposal, such as tellurate of soda (1-5 of a gr. in pill, three or four daily); tincture of hydrastis canadensis (thirty drops at bed-time); oxide of zinc (5 grs. in a wafer) an hour after dinner.

If all these means fail:—

Agaric powder, 5 grs.

Belladonna powder,  $\frac{1}{2}$  gr.

Camphoric acid, 4 grs.

Jaborandi powder,  $\frac{1}{2}$  gr.

For one wafer to be taken at bed-time.

**Dyspepsia.**—Dyspepsia is one of the most serious accidents, for a consumptive patient who eats and digests well will have a chance of recovery.

The gravest dyspepsia is hypersthenia. Out of 100 patients in the first stage of the disease, M. Robin found 70 cases of hypersthenia; in the second period, 60 cases, and in the third 76 cases of hypersthenia and chronic gastritis.

When a patient is suffering from dyspepsia all antibacillary drugs should be suppressed and the nature of the dyspepsia defined.

In case of hypersthenia, animal food should be reduced and the ingestion of raw meat suppressed. Before each repast five drops of the following mixture will be prescribed:—

Tincture of opium, }  
Tincture of belladonna } 2 drs.  
Tincture of hyoscyamus }

and at the end of each repast:

Hydrate of magnesia, 1 dr.  
Carbonate of lime, 2 drs.  
Phosphate (tribasic) of lime, 1 dr.  
Sugar, 1 dr.

Divide into twelve powders; one powder in a little water.

If, on the contrary, hyposthenia is present, the animal regime will be increased on the condition that the meat be reduced almost to a jelly or purée. As an aperitif, the following wafer will be prescribed immediately before each meal:—

Sulphate of potash, 1 gr.  
Bicarb. of soda, 5 grs.  
Hippo powder, 1-5 gr.  
Carbonate of lime, 2 grs.

If gastric fermentation is observed, the quantity of food at each repast will be diminished, but the number of meals will be increased, while the contents of the stomach will be saturated with:—

Bromide of ammonium, 6 grs.  
Water, 10 oz.

A tablespoonful at each meal.

For chronic gastritis, hydrochloric acid and digestive ferments may be given with success.

**Vomiting.**—Vomiting may be caused by the cough, or by dyspepsia. The following drops will be found useful in such cases:—

Picrotoxine, 1 gr.  
Morphia, 1 gr.  
Atropine, 1-5 gr.  
Ergotine, 15 grs.  
Cherry laurel water, 3 drs.

Five drops in a little water before meals, but the entire quantity for the day should not exceed 25 drops.

A small blister over the epigastrium may be tried, and the raw surface powdered with a quarter of a grain of opium.

**Diarrhoea.**—Diarrhoea will be treated by modification of the regime or by raw meat, eggs, rice water. The range of drugs is extensive: tannigene (10 grs. in wafer, three or four times a day); dermatol (10 grs. three or four times daily); oxide of zinc (1 dr. at one time); tannalbin (15 grs. four times a day); enemas of starch and laudanum. A compress steeped in cold water applied to the abdomen and covered with oil silk, cotton-wool and maintained by a bandage, renders frequently great service.

## GERMANY.

Berlin, July 4th, 1909.

In the *Archiv. f. Laryngologie*, XXI., 1, is a paper by Dr. Spiess on

THE IMPORTANCE OF ANÆSTHESIA IN THE TREATMENT OF INFLAMMATION, AND ITS SPECIAL EMPLOYMENT IN THE TREATMENT OF LARYNGEAL TUBERCULOSIS.

The treatment described rests on the basis of the following theory: Through the pain, in the extended sense—i.e., the excitation of centripetal nerves—hyperæmia, and eventually a tumour, are caused by reflex action, until the sensory nerves are deadened and anæsthetised by the pressure of the exudation, as by Schleich's infiltration; with the disappearance of the nerve effect causing the reflex action, the hyperæmia also disappears, and with it the tumour. Why not save Nature the circuit round the inflammation, and set up the curative anæsthesia artificially?

Acting from this point of view, the writer has treated cases of tuberculosis of the larynx with marked success. The best results were obtained with sub-mucous injections of 1 to 2 ccm. of a 2 to 5 per cent. aqueous solution of novocain once or twice daily, or oftener, if the sensitiveness was very great. He employs this method of treatment not only in the treatment of the tuberculous affection itself, but also in the post-operative stage. The first application is usually made after a preliminary application of cocaine.

At the Medical Society Hr. Albu read the report of THE COLLECTIVE INQUIRY COMMISSION ON INFLAMMATIONS OF THE CÆCUM IN GROSS-BERLIN IN 1907.

There were 3,498 answers to inquiry sheets, of which 76 per cent. were from hospitals, the remainder from general practitioners. Autopsies in the fatal cases showed errors of diagnosis in 3.33 per cent.; these were mostly cases of disease of the ovaries and tubes of females.

For statistical purposes 3,016 were available. The mortality in hospital was 9.2 per cent., in private 1.7 per cent., but here the cases were all of the milder type. From the calculations afforded by the figures, about 2 per 1,000 of the population of Berlin suffered from appendicitis annually. Ætiologically, enterogenous infection by *B. coli* and streptococci played the leading part; in a few cases trauma, chronic catarrh of the colon, and intestinal atresia were given as the cause.

As regarded symptoms, in 55 per cent. the disease was accompanied by constipation, in 90 per cent. by abdominal pain, in 62.5 per cent. by fever, in 57 per cent. by acceleration of the pulse. *Défense musculaire* was only slightly observed, but general tension of the abdominal walls was the rule.

Of the cases that were operated on during the first attack, 82 per cent. had abscesses; amongst those operated on during the second attack, 10 per cent. had abscesses; whilst in operations during the third they were found in only 3.3 per cent. of the cases.

The mortality was greatest in first attacks, and diminished with the frequency of them.

The possibility of early operation was not unfrequently rendered null by difficulties of diagnosis, and because the patient had not obtained medical aid in time. The public should be warned to call in the physician in every suspicious case.

In chronic appendicitis a distinction had to be made between the relapsing and the insidious form. Of the former 229 were treated, with 40 fatalities; of the latter 112, with 1 death; 54.5 per cent. of the cases were males.

Hr. Rotter read the report on the treatment. In

round numbers, 3,000 cases were treated, of which 2,705 were acute; 2,365 were treated in hospital, 1,300 by operation, with a mortality of 14.6 per cent. Of these, 423 cases were operated on in the early stage—i.e., during the first 48 hours, with a mortality of 5.6 per cent.; 105 were operated on the first day, and of these only 1 died, whilst of 318 operated on the second day, 22, or 7 per cent., died; on the following days the mortality ran on to 10, and up to 23 per cent., so that in those operated on after the second day the average mortality was 18 per cent.

Of the 1,021 cases not operated on, 17 died—1.6 per cent.—and of the 340 treated at home, only 6 died—1.7 per cent. These figures are low for the reason that all these cases were mild ones. Of 902 chronic cases operated on, 9 died—0.9 per cent.

The results at the Hedwigs Hospital were, on the whole, similar to those obtained in the "Collective Inquiry," except that the mortality in those operated on during the first 48 hours was 1.9 per cent., against 5.6 per cent. of the larger collection. The reason for this was that at the Hedwigs Institution all the cases of medium and great severity were operated on early, whilst some operators took the stand that only the most serious cases should be operated on at once, when the figures must necessarily show worse results. From statistics of the Hedwigs Hospital going back to 1893 it appeared that, so long as conservative principles were followed, the results were much the same year after year, and no improvement set in until early operation was introduced in 1905. In late operation, also, the results had improved, for the reason, as he thought, that he now followed the plan of Rehn of thoroughly washing out both the bowel and the abdominal cavity.

The statistics of other operators also showed an improvement since the abandonment of the conservative method of treatment.

Those of Stricker show only a mortality of 3.1 per cent., but this is assumed to be accounted for by the fact that all the cases were those of soldiers who came under treatment when they were young and strong, the average age being about 20.

On summing-up the results of treatment the speaker concluded that early operation gave the best results. To await the subsidence of the attack and operate in the free interval was not without its risks, as experience showed that most of the fatalities occurred during first attacks.

## AUSTRIA.

Vienna, July 4th, 1909.

### THE THYROID EPITHELIAL BODIES.

KREIDL demonstrated a cat which he had operated on in the laboratory along with Yoshimura in 1906. They first performed thyreo-parathyreodectomy in such a manner as to extirpate the epithelial bodies; the remainder of the gland was destroyed a few days later by the galvano-cautery. The animal never showed any sign of tetany, either during or after the operation.

In the course of a month the left motor region was extirpated, and 24 hours thereafter the animal had an epileptic fit, which was checked by pressing the nerves of the fore feet, but after a few days the animal resumed its normal state. A month later the right motor centre was extirpated as the left had been with a similar result, viz., epileptic fit, and checked by pressure on the nerves of the fore feet after a few seconds. The animal has since had trophic disturbance of the teeth and falling out of hair.

### ERYTHRODERMIA EXFOLIATA.

Ehrmann presented two cases with peculiar form of skin disease which he diagnosed erythrodermia exfoliata generalisata. The first was a male, æt. 60, who previously had had psoriasis. Since February last, the whole skin from the crown of the head to the sole of the foot was red, inflamed, some parts weeping; others covered with a dry scurfy lamellæ, while the hair had entirely fallen out, leaving a fine lamigo in its stead. The face was covered with a fine scurf, and not so picturesque as the body which had the large lamellæ, reminding one of the crocodiles' covering, with

the large rhombic plates, some of these being as large as a two-shilling piece. The glands of the groin ranged from the size of a walnut to that of an egg.

The Rontgen rays were applied with wonderful success, the redness and desquamation having nearly gone, while the glands are reduced to the size of marbles. This is a great advance in a disease that formerly took months, nay, years to accomplish, what can now be done in a very short time.

The second case was that of a female, æt. 40, who also had psoriasis at one time, which subsequently became intermittent, but lately assumed an intense reddening of the entire skin with portions weeping, and others covered with a lamella, as in the former case. The patient in this case was febrile at the onset, the temperature ranging from 37.5° to 38.5° Centigrade, or 99.5° to 101.3° Fahr., with general swelling of all the glands, examination of the blood gave 13 per cent. of eosinophile cells, while the lungs were distinctly infiltrated at the apex. This case may therefore be placed in the group of general idiopathic erythrodermia, depending entirely upon a morbid condition of the blood, and may primarily originate in one of the internal organs. The disease from this point of view is closely connected with leucocythæmia, pseudo-leukæmia, sarcomatosis universalis, mycosis fungoides in the early stage, and tuberculosis. It seems strange that all these forms, in spite of their different ætiology, resemble one another in their blood origin, probably from some toxic or parasitic toxine.

### GUNSHOT WOUND AND TUBERCLE.

Schnitzler presented a patient with a remarkable history after receiving a gunshot wound in the abdomen. From the symptoms of internal hæmorrhage it was deemed prudent to operate at once.

On opening the abdomen the small bowel was observed to be loaded with tubercular nodules along its whole length, although the patient had never complained or felt unwell at any time before the accident. Many of them had ulcerated, as the ulceration could easily be felt through the wall of the bowel. In the peritoneal cavity a quantity of serous fluid coloured with blood, was present. Tuberculin in the eye gave an active reaction in accord with the finding in the bowel. At the laparotomy the bullet was found to have passed through the renal artery and side of the spleen, which was causing a great loss of blood into the peritoneum. The spleen was removed, the artery tied, and the wound closed with a good result.

After showing sections of the extirpated spleen, he showed the members an enormous calculus he had removed from the bladder of a patient by the sectio alta. Its dimensions were 16 by 11 by 6 centimetres, and weight 500 grams, or one pound two ounces nearly. This enormous stone gave no more trouble to the patient than to check the flow, all other symptoms being absent—the urine was clear and free from blood. Schuller had tried lithotripsy before the operation, but failed, as the hardness of the stone resisted all pressure.

## FROM OUR SPECIAL CORRESPONDENTS AT HOME.

### BELFAST.

THE SCHOOL PROBLEM IN IRELAND.—Sir William Whitla, in opening some new national schools last week in Portadown, dwelt at some length on the question of the state of Irish schools, which, he said, was, with few exceptions, deplorably unsatisfactory from a sanitary point of view. The most serious defect was the scandalous inefficiency of the ventilation, whereby, he was certain, many children's lives were lost, while others were crippled for life. The cry of the languishing child doomed to breathe such air rose to Heaven, though it was drowned by the din of party strife and the clamour of political agitation, the shrieks of suffragettes, the hysterics of the anti-vivisectionist, and other well-meaning but misguided people. Every function of the child was depressed, and every organ starved and stunted in its development by the



polluted air, so that their death-rate from tuberculosis in Ireland had become a standing disgrace.

**BRITISH MEDICAL ASSOCIATION.**—It has been announced that his Excellency the Lord Lieutenant and Lady Aberdeen have arranged to visit Belfast during the approaching meeting of the British Medical Association, and to attend several of the functions connected with the meeting. These will probably include the President's address on Tuesday the 27th inst., the annual dinner of the Association on Wednesday, 28th, and the Lord Mayor's reception in the City Hall on Thursday, 29th. A number of American and foreign guests will also be present at the meeting, and elaborate preparations are being made for their reception and entertainment.

Dr. JOHN MILROY, Lecturer in Physiology in Queen's University, has been appointed to the new lectureship in Bio-chemistry in the University.

## LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

### THE TIMES AND QUACK ADVERTISEMENTS. *To the Editor of THE MEDICAL PRESS AND CIRCULAR.*

SIR,—In a recent issue of THE MEDICAL PRESS, a "Medical Temperance Reformer" drew attention to a leading article in the *Times* which elaborately exposed the evils arising out of the traffic in sham tonics containing alcohol, and strongly advocated legislation to prohibit the sale of these pernicious compounds. I have just come across the subjoined excerpt from another later article in the *Times* dealing with the syllabus upon "Temperance" for use in primary schools:—

"We think that a syllabus upon 'Temperance' might with advantage contain lessons upon the dangers of things which are even more insidious than alcoholic drinks, and to which there is only too much reason to believe that many total abstainers have recourse—namely, to preparations of opium, or to the many extensively advertised quack medicines which afford brief tranquillity to the nervous system by sedative drugs of one description or another, such as morphia, cocaine, kola nut, and their analogues, which entail consequences at least as disastrous as those of alcoholic intemperance, and which are less readily brought under control."

Now, Sir, I am not a reader of the *Times*, and I know nothing about its advertising pages; but I do know that most of the leading papers of the day are deriving enormous incomes from advertisements of the harmful compounds denounced by the *Times*, and that these concoctions could not gain the enormous sale they command without the help of newspaper advertisements, and puffs in form of editorial paragraphs now inserted for pay in most papers. Cannot you, Sir, induce your great contemporary to add one more to the many great services it has in past days conferred upon the people by making all the facts with regard to the quack medicine trade so conspicuously prominent that no respectable newspaper dare continue to derive income from so foul a source? If the Editor of the *Times* is not fully supplied with the information needed for such a task, a volume or two of your estimable journal would more than sufficiently provide it.

I am, Sir, yours truly,  
RUSTICUS, M.B.

### PREVENTION OF DENTAL CARIES.

*To the Editor of THE MEDICAL PRESS AND CIRCULAR.*

SIR,—Dr. Robert Lee seems a little dogmatic in declaring that the main cause of dental caries is not improper feeding, but rather "some defect in the pulmonary condition of infants" and "imperfect blood aeration." This seems to me to be putting the cart before the horse. One might as well ascribe pneumonia to "imperfect blood aeration"; it is an effect not a cause of the disease; just as in rickets no doubt imperfect blood aeration would be present in cases during the vital depression of slow starvation

from lack of assimilable food. Not only in this country, but on the Continent, and especially in the institutions in late years established in many parts of France for the help of poor mothers and their offspring, it has been noted by all observers that infantile mortality and infantile malnutrition are mainly governed by feeding. The infants of healthy mothers able to feed them naturally throughout the proper term do not die, and do not develop rickets, or diseases of malnutrition. In proportion as the maternal supply is imperfect, and in proportion as it is made up by inferior substitutes, constitutional disabilities increase. The greatest mortality, and the greatest damage to the physique of survivors is observed in the infants who get very little milk either derived from their mothers, or the cow, and are fed with all kinds of things such as fragments of their parents' food, with which their digestive organs are absolutely incapable of dealing. When in addition the infant is systematically dosed with narcotic quieters in quack nostrums the mischief reaches its maximum. The downward course is doubly hastened by the damp, dark, unventilated dwellings, and filth of person and environment which form the lot of most of the infants of the very poor. As a hospital dentist having availed myself of my ample opportunities of studying infantile constitutional defects during many years, and being besides fairly well acquainted with the literature of the subject, I hope that the expression of my strong opinion in entire disagreement with that of so distinguished a physician as Dr. Robert Lee may not appear too presumptuous.

I am, Sir, yours truly,  
M.R.C.S., L.D.S.

June 30th, 1909.

### THE NORMYL TREATMENT.

*To the Editor of THE MEDICAL PRESS AND CIRCULAR.*

SIR,—Mr. Porteous affirms that over 150 doctors have prescribed the Normyl treatment for their patients. If this is so it seems a pity that their names cannot be ascertained, and their conduct brought before the notice of the Medical Council. To prescribe a secret remedy is a very grave professional offence meriting severe punishment. But when one speaks of a "secret" remedy it is always to be borne in mind that there exist no secrets to analytical chemistry; and as soon as it is worth while, anyone who cares to take the trouble can ascertain the constituents of the Normyl medicines. It is, however, not worth the trouble. The constituents can be only drugs, the action of which are thoroughly well understood by the profession; drugs which, if they have any power such as that claimed for the Normyl remedies, have been used, and are being employed by qualified men everywhere. Any drug or combination of drugs which would cure drunkenness would perform a miracle. Drunkenness is not due to one cause, nor is it a kind of "possession" to be exorcised or driven out by a single remedy. It depends upon an exceedingly complex mass of causes, physical, mental, moral, infinitely varying in different cases; whilst in long continued alcoholism there are brought about easily demonstrable coarse degenerative changes—destruction of tissue elements in the brain—which only a miracle could repair. Is there not really a commercial aspect of the Normyl enterprise. Is not some one making money by the "secret" remedy. The proper course for philanthropists is to make known fully and freely for the benefit of suffering humanity all over the world the methods and means of their treatment. This is the course always pursued by medical men and men of science. As long as secrecy is maintained it is the duty of every medical man and every man of the world to disregard it. It has no more claim to attention than the scores of advertised cures for every disease, the claims of which are backed by many more testimonials from grateful patients than the directors of the Normyl treatment can possibly boast of. Most of such advertised positive cures for incurable diseases turn out on analysis to contain no ingredient capable of causing any physiological reaction of any sort. If the Normyl managers will submit their remedies to some im-

partial scientific tribunal they may easily satisfy themselves as to the character of the illusions they are cherishing.

I am, Sir, yours truly,  
MEDICAL TEMPERANCE REFORMER.

June 30th, 1909.

#### THE REMOVAL OF GROWTHS FROM THE VOCAL CORDS.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—In Dr. Hill's enthusiasm for the removal of growths from the vocal cords by means of direct vision (MEDICAL PRESS AND CIRCULAR, June 30th, 1909, p. 660), he scarcely does justice to the "old indirect mirror and forceps method." It is no exaggeration on Dr. Hill's part that with the method he employs "the patient comes into the hospital one day with a growth and *minus* a voice, and leaves the institution on the next day *minus* the growth and *plus* his voice." At the same time, Dr. Hill, and all those who have faithfully practised intra-laryngeal operation under reflected light must, like myself, have repeatedly had the experience of the patient coming "with a growth and *minus* his voice," and leaving within an hour or so "*minus* the growth and *plus* his voice," without any other anæsthetic except cocaine applied locally. There are undoubtedly cases of difficulty under either method, but the experience above narrated with the indirect one is by no means unusual with the simple instruments with which Morell Mackenzie and his successors have been so successful.

I am, Sir, yours truly,  
DUNDAS GRANT.

London, June 30th, 1909.

#### A GOOD CAUSE.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—The Hospital for Invalid Gentlewomen, established at 90 Harley Street, fifty-six years ago, by Viscountess Canning and Miss Florence Nightingale, is closed owing to the expiration of the lease. A new hospital for 32 patients is in course of construction at 19 Lisson Grove, and will be opened for the reception of patients towards the end of the year. £5,000 are still needed to complete the building and equipment. Should any of your readers feel inclined to assist in this good work, donations may be sent to me direct at 13 Mansfield Street, W.

I am, Sir, yours truly,  
W. C. BRIDGEMAN, M.P.

#### OBITUARY.

GEORGE ARCHIBALD MACONACHIE, M.D. ABER.

WE regret to announce the death of Dr. George Archibald Maconachie, of Aberdeen. Dr. Maconachie studied at the Aberdeen Grammar School, and took his medical course at Aberdeen University, graduating M.B., C.M. in 1866. He received the degree of M.D. in 1872. A year after graduation—namely, in April, 1867—he entered, by competition, the Indian Medical Service, Bombay, where he had a distinguished career. He held various medical appointments, and took part in the Abyssinian War, acting as Medical Officer of the reconnoitring force, and being present at the fall of Magdala. Subsequently Dr. Maconachie was appointed a professor in the Government Medical College, Bombay, and soon afterwards became Principal as well as Professor, and in that dual capacity obtained a large experience in administrative affairs. For upwards of twenty-five years he was a member of the Bombay Educational Department, and besides his connection with the Medical College, held other appointments in Bombay University. He retired from the service in which he had earned so much distinction with the rank of Brigade-Surgeon Lieutenant-Colonel in June, 1891, and afterwards took up residence in Aberdeen.

DR. PETER A. YOUNG, OF EDINBURGH.

ANOTHER prominent member of the medical profession has also passed from our midst in the person of

Dr. P. A. Young, lately Treasurer of the Royal College of Physicians of Edinburgh. Dr. Young was for many years in active practice in Edinburgh, and though he never occupied any hospital or teaching appointments, he was always in active sympathy with medical education and administration, and was for a number of years a manager of the Royal Infirmary. He was Treasurer of the Royal College of Physicians until a year ago, and the College owed much to his management of their finances. Apart from his purely professional work, his first interest was in the affairs of the College. Dr. Young was an enthusiastic Volunteer, and an ardent supporter of the cause of temperance. About three years ago he had a serious affection of the throat which gave rise to great anxiety, and although the fears which it caused were not realised, for he made a complete recovery so far as the local condition was concerned, he never really got over this illness, and for the past year or eighteen months his health gradually failed. He left Edinburgh for the South last autumn, and died at Bournemouth on Friday last.

DR. FINLAY, W.A., OF EDINBURGH.

WE regret also to have to announce the death of Dr. Finlay, which took place at Nairn on June 24th. Dr. Finlay, who was a brother of Sir Robert Finlay, K.C., M.P., was the leading practitioner in the Trinity District of Edinburgh. He had a very large practice, and was for many years Surgeon to Leith Hospital, a post which he resigned in the early nineties. In the autumn of last year his health began to fail, and signs of malignant disease of the œsophagus developed; he was compelled to relinquish his practice and retired to Nairn, his native place. Both Dr. Young and Dr. Finlay were men of the highest type—honourable, upright, courteous, and genial; the greatest sorrow was expressed when it was learned that both of them were compelled through such serious illness to retire from work, and their deaths have cast a gloom over the medical community.

#### SPECIAL ARTICLES.

##### COMPLIMENTARY BANQUET TO SIR FELIX SEMON, K.C.V.O., M.D., F.R.C.P.

ON Friday, the 2nd inst., a large and distinguished company met at the Whitehall Rooms, Hotel Metropole, London, at a complimentary banquet given to Sir Felix Semon, the well-known laryngologist, on the occasion of his retirement from practice.

There were 250 guests, including the Duke of Fife, Count Metternich (German Ambassador), Sir James Reid, Bt., Sir Squire Bancroft, Sir Ernest Cassel, Sir James Dewar, Sir Hubert Herkomer, Sir George Lewis, Sir John Fletcher Moulton, Sir Gilbert Parker, Sir A. W. Pinero, Sir Beerbohm Tree, Sir Charles Wyndham, Sir Henry Morris, Bt., Sir Charles Mathews, Sir Thomas Barlow, Bt., Sir Julius Wernher, Bt., Sir Anderson Critchett, Bt., Sir Victor Horsley, Dr. Dundas Grant, Mr. Henry J. Davis (Hon. Secretary), and Dr. H. Birkett. There were also present a large number of ladies, including a considerable representation of the literary and theatrical professions, amongst them being Mrs. Alec Tweedie and Mrs. Patrick Campbell.

Dr. Davis announced, after the loyal toasts had been honoured, that the subscriptions to the testimonial fund amounted to £1,200, and that contributions had been received from laryngologists in Austria, France, Germany, Russia, Italy, Sweden, and America; while letters had been received from gentlemen all over the world conveying expressions of regret at inability to be present.

The Chairman, in submitting the toast, "Our Guest," gave a sketch of the career of Sir Felix Semon, and spoke of the condition of specialists in London at the end of the sixties of the last century. The throat specialist and the skin specialist were detested—it was more than once stated that no man who practised as such could make a decent income without robbing the public. On that account specialists were kept out of the general hospitals, and

they formed special hospitals, which were even more obnoxious to the profession than specialists themselves. Sir Felix Semon, thirty-three years ago, came to London, having taken his degrees in medicine at the German Universities. He visited the Hospital for Diseases of the Throat in Golden Square, and there found a great wealth of material and ample opportunity for studying the use of the laryngoscope. In the course of time he was appointed clinical assistant to Sir Morell Mackenzie, and in 1877 he settled down in London to practice as a throat specialist.

In 1881 the International Medical Congress was held in London, and Sir Felix Semon was able to obtain the first recognition for laryngology at that congress. A couple of years later he was appointed physician in charge of the department for diseases of the throat at St. Thomas's Hospital, and held that post for fifteen years. Later, it was no surprise to those who knew him well when they saw his name for the first time in the list of honours, and heard that he had been appointed to the Royal Household.

Since the news of his retirement became known, laryngologists said to one another that they could not allow him to go without marking their regard for him. They had some hope that they might be able to found a scholarship connected with laryngology, or something associated with him. This idea was received with such enthusiasm by his friends, who contributed so liberally that they would be able to found a scholarship or lectureship, by means of which his name would be associated with laryngology in London for many years to come.

Five speakers supported the toast.

After Mr. Alfred Mond, M.P., had spoken,

Dr. Dundas Grant, President of the Section of Laryngology of the Royal Society of Medicine, presented to Sir Felix an album of photographs of British laryngologists, and stated that Sir Felix was founder of the British Laryngological Society, which largely owed its success to his energy.

Dr. H. S. Birkett, of Montreal, ex-president of the American Laryngological Association, on behalf of medical friends, presented Lady Semon with a beautiful brilliant.

Sir H. Beerbohm Tree, making a presentation of an album containing photographs of friends in the dramatic profession, said he had always regarded Sir Felix as a lovable altruistic egoist, and he hoped he might long continue as such.

Sir Hubert von Herkomer and Dr. George Finder, of Berlin, also spoke.

Sir Felix Semon, responding, acknowledged the great honour conferred upon him, and stated that the King, whom he had had the honour of serving for very many years, and who had bestowed upon him so many marks of his Royal favour, had been graciously pleased to signify his wish that he should continue to be one of his Physicians Extraordinary. The evening concluded with a musical entertainment.

gery is yet so dark and unexplored as that which contains fractures and minor injuries. A great deal of light is thrown into it by these simple, straightforward essays of Sir William Bennett, which by their common-sense should make the blush mantle to the cheek of many of his highly-placed colleagues in the profession. As the little work is now in its fourth edition we need not deal with in detail; it is essentially a clinical work by a clinician, and to the general practitioner it should be thrice blessed, both for what it will bring him and for what it will bring his patients, if he sets himself to the practices inculcated.

## MEDICAL NEWS IN BRIEF

### Royal College of Surgeons of England—The Museum.

THE annual exhibition of specimens added to the College Museum during the past collegiate year was visited by more people than for many years past, the collections of Egyptian and Congo Free State skulls affording much pleasure to those interested in the history of primitive races. Much of the credit for the success of the exhibition is due to the Conservator, Dr. Arthur Keith, whilst his assistant, Mr. R. H. Burne, and Mr. S. G. Shattock, the pathological curator, contributed to the success in no small measure by the excellence of their physiological and pathological preparations respectively.

### The Royal College of Physicians of Ireland.

THE College will proceed in October next to fill the Chair of Midwifery in the School of Physic, Trinity College, Dublin, rendered vacant by the death of Sir Arthur Macan in September last. The King's Professorship of Institutes of Medicine will also be vacant, as the term for which the present occupant of the Chair—Dr. Walter Smith—was appointed is coming to an end. A fresh election is necessary under the Statute, and Dr. Walter Smith is eligible for re-election.

### Royal Society of Arts.

THE Council have awarded the Society's Silver Medal to the following readers of papers during the Session, 1908-9:—Mr. G. Albert Smith, "Kinematography in Natural Colours"; Mr. Henry C. Brewer, "Gothic Art in Spain"; Monsieur Yves Guyot, "The Commercial Relations of France and Great Britain"; Mr. George Hubbard, "Dew-ponds"; Mr. Walter Rosenhain, "The Application of the Microscope to the Study of Metals"; Mr. Gabriel Gordon Cleather, "The Musical Aspect of Drums"; Mr. C. Reginald Enock, "The Resources of the Peruvian Andes and the Amazon"; Mr. Percy A. Wells, "English Furniture Design and Construction"; Mr. Arthur John Barry, "Railway Development in China"; Herr Sam Eyde, "The Manufacture of Nitrates from the Atmosphere by the Electric Arc"; Mr. Douglas Dewar, "The Birds of India"; Mr. Arthur Anthony Macdonell (Boden Professor of Sanskrit, Oxford), "The Buddhist and Hindu Architecture of India"; Mr. Selwyn Howe Fremantle, "The Problem of Indian Labour Supply"; Mr. Krishna Govinda Gupta (Member of the Council of India), "Some Phases of Hinduism"; Mr. Cecil L. Burns (Principal, Bombay School of Art), "The Functions of Schools of Art in India"; the Hon. Charles Gideon Murray, "The Road to South African Union."

### New Sanatorium for Delicate Children.

IN the scheme of the National Children's Home and Orphanage there has long been realised the need of a sanatorium and open-air school for such little ones who, though not actually consumptive, show signs of predisposition to tubercle. This deficiency is now to be met, and a large company travelled on June 23rd to Harpenden to witness the laying of three memorial-stones, and to judge for themselves how admirable a site for such a purpose has been secured. The committee were able to secure an estate of 200 acres under favourable conditions, and will devote about ten acres

## REVIEWS OF BOOKS.

### MASSAGE IN FRACTURES AND SPRAINS. (a)

SIR WILLIAM BENNETT has been the leading pioneer in this country of the methods of Professor Lucas Championnière, and he has been chiefly instrumental in breaking up the old rule-of-thumb fixation treatment for fractures and sprains, which sent more people limping through the world than all Napoleon's campaigns. In medicine less than anywhere is there room for rules and doctrines, and the charm of its practice is the enormous scope it gives for individuality in the management of patients. Even now many surgeons are content to leave their fractures to their house-surgeons, and in the old days the treatment began and ended with the splint. Happily, a little more science has been imported into the management of these injuries, and we say unhesitatingly that no field of sur-

(a) "Lectures on the Use of Massage and Early Movements in Recent Fractures, Sprains, Rigidity of the Spine, and the Management of Stiff Joints." By Sir William Bennett, K.C.V.O., F.R.C.S., Consulting Surgeon to St. George's Hospital. Fourth Edition. 23 Illustrations. London: Longmans, Green and Co. 1909.

on its highest point, which is 430ft. above the sea level, to the new project. It is estimated that the cost will be approximately £12,000, of which £9,000 is already promised. The buildings will at first accommodate forty children, with an adequate staff of nurses and teachers, though provision will be made for enlargement if necessary. Dr. T. N. Kelynack is honorary medical adviser to the institution, and his plans in this direction have won the cordial approval of Sir Thomas Barlow, who publicly commended them at a Mansion House meeting last year. The architects are Messrs. Holman and Goodrham.

The stones were set in position by Miss Marshall, daughter of Sir Horace Marshall; Miss Ainsworth, a niece of Sir Thomas Barlow, and Alderman Sir Charles Wakefield, who presided, and acted thus on behalf of Miss Perks, daughter of Sir Robert Perks, unavoidably absent through the illness of a relative. Among those present were Lady Wakefield, Sir Horace and Lady Marshall, the Rev. Joseph Shrimpton (chairman of the Bedford and Northampton Wesleyan Synod), and the Rev. George Hooper (president of the Metropolitan Free Church Council). Sir Thomas Barlow wrote expressing his regret at being unable to attend and saying that the sanatorium would be a real Godsend to many children just over the border-line, who would receive the most thorough and advanced methods of hygienic treatment.

#### Damages for Barber's Rash.

AT Clerkenwell, on the 2nd inst., Harold Maurice Carter, a civil servant, of Oakhurst Grove, East Dulwich, was awarded 20 guineas and costs against W. Fowler, a Gray's Inn Road hairdresser, for an attack of barber's rash. His claim was for £50.

His Honour Judge Edge, after hearing the evidence, said that he had no doubt the rash was brought on through the use of some instruments that were not in the condition in which they ought to be, although there was no personal fault on the part of the proprietor of the shop.

#### Murders by an Indian Student.

THE second victim of the murderous attack by an Indian student named Dhingra, after shooting Sir W. Curzon Wylie, was Dr. Lalca, a Parsi doctor, who was killed by a bullet which entered just below the right breast and passed out behind the left shoulder. He is a resident of Shanghai, but originally belonged to Bombay. He came to this country on a visit only a few weeks ago, and was staying at the Grand Hotel. He was held in high respect by his many Indian and English friends.

A Reuter telegram from Shanghai says that Dr. Cawas Lalca was 46 years of age. He was born at Ahmedabad, in Gujrat, and made his preliminary studies in medicine at Bombay. He went to London in 1884, where he took the degree of L.R.C.P. He took the degree of M.D. at Brussels in 1886. He had a large practice in Shanghai, where he was Surgeon-Major and principal medical officer of the Volunteers of the British settlement, and leader of the Parsi community.

#### Royal Medical Benevolent Society of Ireland.

A REGULAR meeting of the Central Committee was held at the Royal College of Surgeons on Wednesday afternoon—Mr. Arthur Benson in the chair.

The Secretary stated that a donation of 20 guineas had been received from Dr. Horne, President of the Royal College of Physicians. The Secretary was instructed to convey to Dr. Horne the best thanks of the Committee for his generous donation.

The Secretary stated that the collection made at the annual dinner of the Irish Medical Association resulted in an addition of £27 7s. to the funds of the Society. A resolution of thanks was unanimously adopted.

Letters were read from Dr. Palmer resigning the post of Hon. Secretary and Treasurer of County Armagh (N.) Branch; from Dr. McKenna resigning the post of Hon. Secretary and Treasurer of County Monaghan Branch, and from Dr. H. G. Molony resigning the post of Joint Secretary and Treasurer of County Limerick Branch. Resolutions of regret were unanimously adopted.

Four urgent applications were considered, and grants amounting to £80 were made, and bills amounting to £50 4s. 10d. were passed for payment.

#### Cholera in Russia.

THERE were 94 fresh cases of cholera on July 1st in St. Petersburg, and 29 deaths. The total number of cases at that date was 607. Five cases of cholera have occurred at Archangelsk.

#### University of Birmingham.

THE following is a list of successful candidates at the June examination:—

I.—Degrees of Bachelor of Medicine and Bachelor of Surgery.—(a) Official.—William F. Haslam and Percival P. Cole. (b) Under Ordinary Regulations.—†Walter C. Blackham, Herbert H. Sampson, Harold C. Terry, Ethel A. Waldron, Kenneth D. Wilkinson.

II.—Fourth Examination for the Degrees of M.B., Ch.B. (Forensic Medicine and Toxicology and Hygiene and Public Health).—Class I.—\*Eric W. Assinder. Class II.—Elizabeth S. Impey, Arthur H. Newton, John L. Ritchie, Cranston Walker. (\*Queen's Scholarship. †Ingleby Scholarship.)

III.—Third Examination for the Degrees of M.B., Ch.B. (Pathology and Bacteriology and Materia Medica and Pharmacy).—Class I.—\*Oscar M. Holden. Class II.—James H. Bampton, Robert B. Coleman (Materia Medica and Pharmacy), Christopher C. C. Court (Pathology and Bacteriology), Evan Davies (Pathology and Bacteriology), Travis Hampson (Pathology and Bacteriology), Charles W. Hayward (Pathology and Bacteriology), Elizabeth S. Impey (Materia Medica and Pharmacy), Charles C. Jones, Douglas N. Macleod (Pathology and Bacteriology), Ronald D. Nelson, Percy A. Newton, Arthur M. Pickup (Materia Medica and Pharmacy), Charles E. Salt, Arthur C. Tibbits. (\*Queen's Scholarship.)

IV.—Second Examination for the Degrees of M.B., Ch.B. (Anatomy and Physiology).—Class II.—George H. Alabaster, Edward Bach, Ralph A. Broderick, Eric F. Buckler, Elsie M. Humpherson, John C. Jones, John B. Lowe, Douglas N. Macleod, Horace C. Nickson, Herbert Sheasby, Charles L. Spackman.

V.—First Examination for the Degrees of M.B., Ch.B. (Chemistry, Physics and Biology).—Class II.—Elizabeth L. Ashby, Robert Ellis, James H. Ritchie, Thomas S. Stafford (Biology). External Candidates.—Koch H. Gill (Chemistry and Biology), Alfred P. Smith.

#### Trinity College, Dublin.

THE following candidates passed the Intermediate Medical Examination during Trinity Term, 1909:—Part I.—John Colgan and Jacobus M. S. Gericke (passed on high marks); Frederick B. M'Carter, Eileen Hewitt, Hubert T. Bates and Robert A. Flood (æq.), James N. Armstrong, Georgina Revington, Robert G. Ball, Dorothy K. Milne, William E. Fetherstonhaugh, Edwin F. O'Connor, Jerome H. Counihan, Jevan H. Powell, Arthur P. Draper and Hugh G. Trayer (æq.), Robert H. C. Lyons, Cecil Rutherford, William Frier, Oswald V. Burrows, James H. Grove-White, Richard L. Grandy, Antonie C. Redelinghuys, Humphry L. Blackley, Hugh E. Williams, Frederick A. Burke.

Purser Medal in Institutes of Medicine.—Jacobus M. S. Gericke.

Medical Travelling Prize and Banks Medal.—Albert Stals.

Banks Prize.—John L. Phibbs.

The M.Ch. Degree was bestowed on J. Singleton Darling, and the M. Dent. Sci. Degree on Ernest S. Friel.

The following passed the Final Examination in Medicine.—Part II.—Surgery.—Thomas A. Hughes, Ralph T. St. J. Brooks, David Duff, and Eric J. Powell (passed on high marks), John D. Kernan, George E. Craig, Edwin B. Bate and Frederick R. Sayers (æq.), David J. Miller, Frederick G. Anderson, Charles G. S. Baronsfeather, James P. S. Dunn, Wellesley R. Allen, Denis J. Stokes.

MR. H. MORRISTON DAVIES, M.C. (Cantab), has been appointed Assistant Surgeon to University College Hospital, London.



## NOTICES TO CORRESPONDENTS, &c.

OUR CORRESPONDENTS requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

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CONTRIBUTORS are kindly requested to send their communications, if resident in England or the Colonies, to the Editor at the London office; if resident in Ireland to the Dublin office, in order to save time in reforwarding from office to office. When sending subscriptions the same rule applies as to office; these should be addressed to the Publisher.

MR. R. S. SAMUELS.—There is a new edition of the book announced as in the press. We would advise your waiting for this; the work is an excellent one, and we can recommend it.

A CORRESPONDENT of the *Manchester Guardian*, writing of "the Chinese system of paying your doctor to keep you well," says that he came across the custom when living in St. Petersburg thirty years ago. The weak spot in this, he remarks, as in the club-doctor system, is the doubt who is to be the judge whether a man is well or ill?

AMBOCEPTOR.—The article in question is proprietary, and we presume the author of the paper dealing with it has convinced himself of its therapeutic value before committing his views to print. If there is to be any rule on the subject, it must clearly apply to members of one College as well as of another. Unwritten rules are apt at times to be applied unequally. It is the old proverb of one man not being able to look over a fence, while another may steal a horse.

DR. T. D. L.—Proof will be sent to you in due course.

MR. F. DIXON has sent us a letter, too long to publish, in answer to Mr. Sers' assertions that there is a money basis to the Christian Science publications. Mr. Dixon asks if religious and medical books are distributed gratis. The cases are not analogous with the Christian Science publications, inasmuch as the latter advocate a special treatment, which is in the hands of a small knot of persons—in other words, there is a not indistinct suggestion of the "puff oblique" in this matter. Mr. Dixon has not, in our opinion, traversed the criticism that so-called "Christian Science" healing has a money-making basis.

## Meetings of the Societies, Lectures, &c.

### WEDNESDAY, JULY 7TH.

MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22 Chenies Street, W.C.)—4 p.m.: Mr. T. Walker: Clinique (Surgical). 5.15 p.m.: Lecture: Dr. A. F. Tredgold: Feeble-minded Children.

NORTH-EAST LONDON POST-GRADUATE COLLEGE (Prince of Wales's General Hospital, Tottenham, N.)—Clinics: 2.30 p.m.: Medical Out-patient (Dr. T. R. Whipham); Skin (Dr. G. N. Meachen); Eye (Mr. R. P. Brooks).

### THURSDAY, JULY 8TH.

MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22 Chenies Street, W.C.)—4 p.m.: Sir Jonathan Hutchinson: Clinique (Surgical). 5.15 p.m.: Lecture: Dr. J. Collier: Acute Polyneuritis and Landry's Paralysis (illustrated by cases).

NORTH-EAST LONDON POST-GRADUATE COLLEGE (Prince of Wales's General Hospital, Tottenham, N.)—2.30 p.m.: Gynecological Operations (Dr. A. E. Giles). Clinics: Medical Out-patient (Dr. A. J. Whiting); Surgical (Mr. H. W. Carson); X-Rays. (3 p.m.: Medical In-patient (Dr. G. F. Chappell).

### FRIDAY, JULY 9TH.

OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM (11 Chandos Street, Cavendish Square, W.)—8 p.m.: Card Exhibit by Dr. F. W. Edridge-Green of Spectroscope for Testing Colour Perception. Mr. A. Lawson and Mr. M. Davidson: A Preliminary Note of the Treatment of Eye Disease by Radium. Presentation of the Nettleship Medal to Mr. Nettleship. The Annual Meeting of the Society will be held immediately after the Ordinary Meeting.

MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22 Chenies Street, W.C.)—4 p.m.: Mr. R. E. Bickerton: Clinique (Eye).

CENTRAL LONDON THROAT AND EAR HOSPITAL (Gray's Inn Road, W.C.)—3.45 p.m.: Lecture: Dr. D. McKenzie: External Ear.

NORTH-EAST LONDON POST-GRADUATE COLLEGE (Prince of Wales's General Hospital, Tottenham, N.)—10 a.m.: Clinic: Surgical Out-patient (Mr. H. Evans). 2.30 p.m.: Operations (Mr. W. Edmunds). Clinics: Medical Out-patient (Dr. A. G. Auld); Eye (Mr. R. P. Brooks). 3 p.m.: Medical In-patient (Dr. R. M. Leslie). 4.30 p.m.: Lecture: Mr. R. P. Brooks: Subconjunctival Injections in the Treatment of Eye Disease.

## Appointments.

CARRUTHERS, GEORGE, M.D., O.M. McGill, Clinical Assistant to the Chelsea Hospital for Women.  
COX, E. HARVEY, M.B., Ch.B. Manch., Honorary Surgeon to the Rochdale Infirmary.  
DOHERTY, D., L.R.C.P. and S. Edin., L.F.P.S. Glasg., Certifying Surgeon under the Factory and Workshop Act for the Clonmany District of the county of Donegal.  
FALCONER, ARTHUR WELLESLEY, Assistant Anaesthetist to the Aberdeen Royal Infirmary.  
HEGARTY, J., M.D., M.S.Q.U.I. Certifying Surgeon under the Factory and Workshop Act for the Cloonbur District of the county of Galway.  
MCLEWEN, H. F., M.D. Halifax, Clinical Assistant to the Chelsea Hospital for Women.  
MARTIN, E. K., M.B., B.S. Lond., M.R.C.S., L.R.C.P. Lond., House Physician at University College Hospital.  
O'HART, P., M.B., B.S.E.U.I., Certifying Surgeon under the Factory and Workshop Act for the Carney District of the county of Sligo.  
PARRY, JOHN R., M.B. Tor., Clinical Assistant to the Chelsea Hospital for Women.  
STERN, ROBERT HUNTER, M.D. Lond., Professor of Psychological Medicine at King's College.  
TASKEE, H. L., M.R.C.S., L.R.C.P. Lond., Obstetric Assistant to University College Hospital.  
TRICHMANN, OSKAR, F.R.C.S. Eng., Clinical Assistant to the Chelsea Hospital for Women.

## Vacancies.

West Riding Asylum, Wadsley, near Sheffield.—Fifth Assistant Medical Officer. Salary £140 per annum, with board, etc. Applications to the Medical Superintendent.  
Queen Alexandra Sanatorium, Davos Platz, Switzerland.—Resident Medical Superintendent. Salary £200 per annum, with board and residence. Applications to the Joint Hon. Secs. Wm. Ewart, M.D., 31, Upper Brook Street, London, W. Worcester County and City Asylum, Powick.—Third Assistant Medical Officer. Salary £140 per annum, all found. Applications to the Superintendent.  
Royal South Hants and Southampton Hospital.—House Physician. Salary £100 per annum, with rooms, board, and washing. Applications to T. A. Fisher-Hall, Secretary.  
Victoria Hospital, Burnley.—Resident Medical Officer. Salary £100 per annum, with residence, board, and washing. Applications to F. A. Hargreaves, 7, Grimshaw Street.  
Whitehaven and West Cumberland Infirmary.—Resident House Surgeon. Salary £120 per year, with board and lodging. Applications to W. H. Sands, Secretary.  
Administrative County of Somerset.—County Medical Officer of Health. Salary £700 a year. Applications to G. I. Simey, Clerk of the Somerset County Council.  
Berks County Asylum, Wallingford.—Second Assistant Medical Officer. Salary £150 per annum, with board, furnished apartments, attendance, etc. Applications to Medical Superintendent.  
Northern Infirmary.—House Surgeon. Salary £100 per annum, with board, etc. Applications to Mr. Duncan Shaw, W.S., Inverness.

## Births.

ADDISON.—On June 28th, at Mahe, Seychelles, the wife of J. B. Addison, M.R.C.S., L.R.C.P., Colonial Medical Service, of a son.  
COOPER.—On June 29th, at 29 Eccleston Street, Eaton Square, London, the wife of Austin Cooper, M.D., of a daughter.  
JOSELYNE.—On July 1st, at Kingsclere, Hants, the wife of F. P. Joseplyne, M.D., of a son.  
KILLICK.—On June 29th, at Trinity House, Maidstone the wife of Charles Killick, M.D., F.R.C.S., of a daughter.

## Marriages.

HUMPHRY-DREWITT.—On July 1st, at the Parish Church, Oving, Sussex, Philip Reginald Humphry, M.R.C.S., L.R.C.P., eldest son of Dr. and Mrs. Humphry, of St. John's Street, Chichester, to Kathleen Ellen, younger daughter of Mr. and Mrs. C. J. Drewitt, of Drayton House, Chichester.

## Deaths.

HAZELTON.—On June 29th, at 83 Oxford Gardens, London, Robert Hazelton, F.R.C.S.I., in his 85th year.  
ORMEROD.—On June 29th, at 51 Brunswick Place, Hove, Brighton, Maria, widow of Edward Latham Ormerod, M.D., F.R.S., of Brighton, aged 77.  
WOLFENDEN.—On July 1st, at Eastbourne, Jessie Stuart, wife of Richard Norris Wolfenden, M.D., of the Grange, Sidcup, and youngest daughter of the late James Jardine, of Alderley Edge, Cheshire.

# THE MEDICAL PRESS AND CIRCULAR.

"SALUS POPULI SUPREMA LEX."

VOL. CXXXIX.

WEDNESDAY, JULY 14, 1909.

No. 2.

## NOTES AND COMMENTS.

### Constructive Murder.

THERE was tried at the West Riding Assizes, last week, a Mrs. Lyle, sixty years of age, who for many years had carried on the practice of abortion-mongering. A large number of women came forward and gave evidence against her, saying that they had been operated on to procure abortion. The charge in this case was one of murder, a wretched woman on whom Mrs. Lyle had operated, having died of septic peritonitis. In a dying declaration the poor creature had stated all the facts of her visit in the clearest possible language. There was absolutely no shadow of doubt all through that the prisoner not only was guilty of the particular crime she was charged with, but that she was an old, deliberate and habitual offender. Counsel for the defence made no attempt to dispute the evidence and called no witnesses of any kind, but he concentrated all his energies in getting the crime reduced from murder to manslaughter, and in this he was successful, the prisoner being eventually awarded ten years' penal servitude. If a jury refuses to convict a woman of murder under circumstances such as these, it may be taken that the slaying of a woman through performing an operation for abortion has come to rank with infanticide, namely, as a form of murder which is so lightly regarded that prisoners convicted of it know they run no risk to their own lives. Such an attitude, as regards abortion, is deplorable, for we have little doubt that if the death penalty were carried out in a few heinous cases, the crime would be recognised as not worth the candle.

### A Modern Cynic.

THE more one sees and hears of the actions of the anti-vivisectionists, the more one marvels that human beings, who fill an ordinary part in human society, can be so utterly devoid of any sense of common decency. A kind of insane mod-ideism seems to possess them, till every action, the simplest and the most elementary, of those they hate, is invested with a halo of villainy. It is hardly possible to understand how a barrister and a Member of Parliament, such as Mr. Ellis Griffith is, can have been so utterly lacking in all sense of proportion as to propound to the Home Secretary last week such a question as he put to Mr. Gladstone. At the *conversazione* of the Royal Society, in May, Dr. Waller showed the variation in electrical potentials which take place with the pulsations of the heart, by the very simple experiment of standing a dog in a series of electric cells placed in circuit with a galvanometer. The needle shows a series of constant changes with the beats of the heart, a fact which may have, and, indeed, is already claimed to have, a considerable bearing on cardio-therapeutics. But

whether immediately useful or not, this simple experiment has a high suggestive value, for anything in the nature of electro-therapeutics in heart affections has not yet been thought of.

### The Paddling of the Bull-Dog.

BUT Mr. Griffith has for some years past endeavoured to achieve notoriety by championing the cause of dogs in the House of Commons, knowing that most of the people's representatives, like the people themselves, are personally attached to dogs. Still, it is possible to overdo a rôle, and we sincerely congratulate Mr. Gladstone in having disposed, once and for all, of Mr. Griffith's inflated pretensions. Mr. Griffith asked the Home Secretary whether at this demonstration Dr. Waller had not "secured" the dog—a bull-dog, by-the-bye—by a leather strap with sharp nails, immersed his feet in glass jars, which jars were connected with galvanometers; and whether Dr. Waller was licensed to perform such an experiment; whether Burlington House was licensed for such experiments; and, finally, whether any action was being taken in the matter. Even Mr. Gladstone's official propriety was not proof against such a glaring misrepresentation of facts, especially as he had himself seen Dr. Waller and played with the bull-dog. He said that the "leather strap with sharp nails" was an ordinary dog-collar with brass studs; that the dog stood in ordinary salt solution; that the dog was neither tied nor muzzled; and that the experiment was absolutely painless, in fact, if the honourable member had paddled in the sea he would have experienced the same sensation. Roused by the laughter which greeted these sallies, Mr. Griffith and two others of the sillier type of anti-vivisectionists tried to save the faces of their prompters, but the hollowness of the whole performance caught the imagination of the House, and we can only pray that a few more of these spiteful and infantile performances may be given, so that people may realise the real character of the anti-vivisection movement.

### The Dog as Servant to Man.

WE are not at all inclined to let this question of the dog go by default. Mr. Ellis Griffith brings himself before the public about once every session of Parliament by presenting a huge petition against dogs being used for the purposes of scientific research. As dog-lovers, we are all in favour, we need hardly say, of decent and proper treatment, and if Mr. Griffith, instead of endeavouring to prevent earnest and truth-seeking men to forward the interests of their fellows by experiments on dogs, tried to stop the painful exhibition which maudlin women make of themselves by coddling these noble creatures in fine linen and false teeth, he would be serving his species far

better. The sympathy it is sought to raise in favour of dogs is purely artificial sympathy, and we would specially commend to his notice the admirable pamphlet by Professor Starling, issued by the Research Defence Society, "On the Use of Dogs in Scientific Experiments." Professor Starling shows that, apart from subsidiary reasons, the dog is an indispensable animal for experiment in modern academic scientific laboratories, and for this contention he advances five reasons. Apart from all others, let us concentrate on his number five. Here he shows that Pawlow's work on digestion carried out in dogs—all perfectly painless—has practically revolutionised our knowledge of digestion, and consequently our treatment of gastric disorders. It is not yet ten years since "indigestion" was regarded as a simple condition, and was treated on stock lines. Nowadays a physician, under the influence of Pawlow's conclusions, regards indigestion as a complex condition, and it is on his knowledge of the factors which produce the disease that he is able to prescribe and apply the proper treatment. Without the dog, which, like man, is almost an omnivorous animal, these new and most important lessons could never have been learned. We can hardly expect that Mr. Ellis Griffith will be impartial enough to read Professor Starling's pamphlet, and still less can we hope that he will be sufficiently fair to do justice to its conclusions, but we may perhaps be allowed to express the hope that the Government will recognise the type of mind they have to deal with, and that they will not promote the honourable Member for Anglesea to a judicial position where qualities of head and of character are specially needed for the due administration of justice.

**Holloway's Pills.** THE estate of the late Mr. Henry Driver-Holloway, the proprietor of "Holloway's Pills," has been sworn at £42,681, and, after making various bequests, the residue is

left to his widow, with remainder to his children. This sum compares favourably with the sum of Mr. Thomas Holloway, who left estate valued for probate at £596,335, much of which, as is well known, went to the foundation of Virginia Water Asylum and the Holloway College for Ladies. There would seem to be a certain significance in these facts. Holloway's pills, presumably, are the same as ever they were, and yet the revenue derived from them must have fallen substantially, one would imagine, to judge from these amounts. If the pills have not lost their magic, we must seek another reason. We fancy it is to be found in the less publicity given to them than was the case thirty years or so ago. While we abhor the whole of patent medicines as subversive of the morality, both of the proprietors and of the organs they advertise in, and also of the public health, we in candour admit that some of the proprietors do seem to shrink from the unblushing, lying type of advertisement which fill the sheets of, alas, almost every journal in the land. Holloway's pills do not seem to have emulated the later Transatlantic type of blatant falsehood, and the receipts would appear from that reason to have dwindled. In the reports of public companies trading as patent medicine vendors, it is always explained at the annual meetings that the enormous amounts spent on advertisement are necessary to keep the business going at all, and we have no difficulty in seeing that practically the whole assets of such companies is goodwill represented by the money spent on advertisement. The subservience of the press to this influence is not the least of the influences that tempt staunch democrats to despair of their faith.

## LEADING ARTICLES.

### THE PHYSICAL SIDE OF PUBLIC SCHOOL LIFE.

It is difficult to exaggerate the importance of the bearing of physical exercise upon school life. Indeed, it may be said broadly that the national physique of the coming generation may be made or marred by the wisdom or otherwise with which this important matter is handled. In the case of public schools, things have until recently been permitted to take their own course, with results that, generally speaking, have been on the whole satisfactory. In this struggle for survival the fittest have doubtless come out unscathed, but, on the other hand, it is absolutely certain that the weak have gone to the wall, and many a physically defective life has been ruined before the rigorous test of a public school environment. These facts have at length been recognised by medical science, and, later, by the Legislature, with the result that the whole question is being dealt with by competent authorities. Pointed attention was drawn to the matter by the appearance of a letter signed by five eminent medical men in the *Times* of February 8th last. In that communication they condemned school and cross-country races exceeding one mile in distance as unsuitable for boys under the age of nineteen years. They argued that the continued strain involved in that special form of exertion was apt to cause permanent injury to the heart and other organs. Their challenge was naturally taken up forthwith by the Medical Officers of Schools' Association, who have brought together and published a mass of facts and conclusions in a pamphlet with the title, "School Athletics and Boys' Races." At a meeting of the Association held on March 5th a series of important resolutions were adopted, and these we propose to quote briefly, with a running commentary. Their first conclusion that age is not the best criterion of physical fitness seems more or less self-evident, in spite of the arbitrary standard taken by the "five eminent London doctors." Most men familiar with public schools will recall boys who at various ages have shown remarkable aptness for some particular form of continuous physical exertion, it may be long distance swimming or long diving, the mile race or the cross-country run, or of rowing, cycling, walking, and so on. In some way a particular lad has the perfect balance of physique, lungs, heart, muscles and temperament that fits him for excellence in some peculiar branch of sustained athletics. But it would be impossible to imagine that such excellence could be attained, or, at any rate, maintained, for more than a brief space of time by any boy who was physically unfit. And this reflection brings us by easy stages to the unanimous approval by the Association of the principle of subjecting boys on entering a public school to thorough medical examination. Without that preliminary test it is impossible to exclude boys who are physically unfitted for the strain of violent athletic exercises. To expose, say, a hundred school-boys who have not undergone a medical examination, to a twelve or fifteen-mile cross-country run would be infallibly to court disaster in a certain percentage of cases. The medical officers hold, it appears to us justly, that the

quarter-mile is one of the most exhausting of all races. We were hardly prepared for the conclusion that hockey is more exhausting than football, and that girls playing hockey should be subjected to periodical medical examination. Our readers will find no difficulty in endorsing the warning against active exercise immediately after a meal, or against the risk of over-exertion during convalescence. While we agree with the desirability of carefully inquiring into the matter of school athletics, the main thing seems to be in the exclusion of the physically unfit at the outset, and, if necessary, at later stages of school life. Athletics, like tea, tobacco, alcohol, food, and many other things, can be indulged in by the strong to an extent that would be highly, and perhaps permanently, injurious to those less physically perfect. It seems probable that the athletic exercises of school and college life rarely injure the strong, witness the after career of athletes who have pulled in the 'Varsity boat-race. Exercise of some kind is necessary for all public school-boys, whether strong or weak, and the question of degree is one that must be left to medical supervision. In this respect a valuable suggestion was made by Sir Lauder Brunton, namely, that greater importance should be attached to systematic exercises, as opposed to athletic competitions. That there is need for propaganda such as those published by the Association we are sharply reminded by the fact that, of thirty-eight representative schools furnishing information, only eleven examine the boys on entry to the school. That is to say, in twenty-seven public schools a boy with some valvular lesion of the heart may join in some violent athletic sport which may shorten or destroy his life. The responsibility is one from which it may be imagined most school authorities would shrink, did they but realise the facts of the situation. Yet the principle of medical inspection of school children undoubtedly represents one of the greatest practical advances in modern times towards the safeguarding and the raising of the standard of our national physique.

### CURRENT TOPICS.

#### The Presidency of the Royal College of Surgeons, England.

THE annual election of President of the Royal College of Surgeons always takes place at the first Council meeting after the election of the new members to the Council, and the choice this year has fallen upon Mr. H. T. Butlin, one of the consulting surgeons to St. Bartholomew's Hospital. Mr. Butlin, of course, has high claims to the honoured position to which he has attained. He became a Fellow of the College as long ago as December, 1871, two years before the retiring President, Sir Henry Morris; he is not, however, the senior Fellow on the Council, the "father" of that august body being Mr. Clement Lucas, who has just been re-elected to a further term of eight years' office. Mr. Lucas is six months senior to the new President, in the date of Fellowship. The two members of the Council who have been chosen Vice-Presidents are Mr. Pearce Gould and Mr. Lucas. The vice-presidencies, it need scarcely be pointed out, carry with their office none of the special honours

which belong to the Presidential chair, nor can they be regarded as stepping-stones to the office of President, although it is usual for a President to have previously filled one of these junior posts. At one time a strong feeling prevailed among many of the Fellows that the election of President should be added to the privileges which belong to the Fellowship, and efforts were made to urge this reform upon the Council, the main contention being that at the sister college, the Royal College of Physicians, the Fellows possess the right of electing their President. Naturally, however, the Council then existing were unable to comprehend the force of the argument, and declined to consider the proposal. The weak point, obviously, on the side of the reformers was that they were unable to show any evidence which could be said to render the innovation necessary. And, as a matter of fact, it is common knowledge that these elections within the Council itself are most jealously guarded. Not only are the interests of the College to be considered, but weight has to be given to the maintenance of the reputation of the surgical profession in this country, of which the Presidency of the Royal College of Surgeons represents the Blue Ribbon. In view, therefore, of past experience in these elections, it is doubtful whether, if the Fellows had had the right of election, they would have done as well as the Council. Of course, similar questions of expediency obtain in the election of the President of the Royal College of Physicians, and these questions the Fellows decide for themselves; but perhaps there is more cohesion, more organisation, among the Fellows of the Royal College of Physicians than is the case among the Fellows at the College in Lincoln's Inn Fields.

#### Death Certification.

AN unpleasant incident which occurred at Newcastle last week throws into strong relief the unsatisfactory state of the law regarding death certification. A butcher, named Robson, a man of seventy years of age, died suddenly of cardiac disease. He had previously been attended by Dr. Colly for that complaint, which was accompanied with attacks of angina pectoris. A month after Dr. Colly's last attendance, news was brought him of Mr. Robson's death, which had occurred under every circumstance pointing to angina pectoris. At first Dr. Colly was not sure which of his patients Mr. Robson was, as, since attending him, he had seen no less than fifteen persons of that name. On being shown his photograph, however, he recognised which of the sixteen Robsons was the one, and, in accordance with his statutory duty, he certified that, to the best of his knowledge and belief, the patient had died of angina pectoris. The coroner, however, ordered an inquest, and gave the post-mortem to Dr. W. J. Wilson, who found that death was due to heart failure following on disease of the organ. The jury found in accordance with this view, and further expressed the opinion that Dr. Colly had given a certificate on evidence insufficient to warrant it, as he had not seen the patient for a month, and not at all after his death, a letter from Dr. Colly, which was read at the adjourned inquest, notwithstanding. This letter stated cogently the law of death-certification, and pointed out that he (Dr. Colly) was under a statutory



obligation to certify "to the best of his knowledge and belief," as he had no reasonable doubt as to the cause of death. Nevertheless, the jury passed the above-mentioned censure, which, in our view, was an unmerited slight on a practitioner, and was due to the jury—and probably the coroner—being unaware of how the law really stands. The latter, of course, compels a man to certify, and nothing is said about reporting to the coroner; it is assumed that the latter official will get his information from the district registrar, and act accordingly. No medical man is bound, or even asked, to supply information to the coroner; the coroner's duty, in the strict legal sense, is confined to his work at the inquest itself, whereas the medical man has no option, for he has to give a certificate; the coroner's function is merely to decide on an inquest if he thinks the death due to other than natural causes. By the doctor, in his strictly legal position, it is necessary that a certificate *shall* be given, and the future is left to look after itself! We consider that Dr. Colly was treated both illegally and unworthily by the jury in the case under notice, and the coroner should have directed them as to their responsibilities.

#### Dirty Dublin.

THE recent dry weather has again brought emphatically to the notice of the citizens of Dublin the dirty condition of the streets. On many occasions we have had to notice this nuisance, but we cannot as yet congratulate the Corporation on putting their streets into a cleanly and respectable condition. Horse-droppings still lie unswept and ungathered in the streets, to be beaten into dust by wheels and hoofs, and then carried by the wind to the sleeping and living rooms of the unfortunate and over-taxed ratepayers. On a previous occasion, when we commented on this disgusting condition of affairs, the Corporation referred our comments to the Cleansing Committee, which solemnly reported in reply. The Committee stated that our allegations must be baseless, as more tons of street sweepings were removed per mile of street in Dublin than in certain other cities. This may be quite true. The streets of Dublin are unusually wide, and are worse paved than those of any other city we know. In addition, the "street sweepings" in Dublin are to a great extent the scavengings of the city, for in the poorer quarters refuse is constantly thrown on the streets, to be removed or not as the Corporation employees think fit. We had hoped that, though finding themselves "not guilty," in reply to our charges, the Cleansing Committee might have silently resolved not to do it again. It appears we were wrong, and the Dublin ratepayer still has the pleasure of paying for work which is not done.

#### The Proposed Tax on Petrol.

THE Chancellor of the Exchequer received a deputation of medical men recently on the subject of the proposed taxation of petrol and motor-cars. The deputation urged that medical motorists should receive at least the same relief as that granted to those using motor-cars for commercial purposes. The Chancellor replied that he was convinced of the justice of so doing, so far as the rebate on

petrol was concerned. His difficulty was as to the practicability of carrying out the concession. The deputation might, however, take it that he would make the alteration asked for. This is a very important concession, so far as medical men are concerned, and we trust that it will be satisfactorily carried into effect. Medical motorists should not regard their point as obtained until it is part of the Bill. Even then it will be necessary to see that both it and the rebate on motor-car taxation are granted on such terms as to be practicable. If the rebates are only granted on the condition that a car is never to be diverted from the path of strict duty and attendance on patients, they will obviously be intended only for the eye, as under such conditions all rebate might be lost because a car owner once turned off his road to accommodate a friend. The medical owner should be obliged to state that he had purchased his car for the purposes of his profession, and that he so used it, and, once this had been accepted, hampering restrictions as to its further use could only result in rendering the concession valueless.

#### Medical Men and Public Speech.

IN speaking from the chair, when giving away the prizes at St. Thomas's Hospital recently, Mr. Alfred Lyttleton made the curious statement that medical men had the best opportunity of learning the art of speaking, because they always had attentive audiences in their patients, whereas politicians and lawyers had often to speak to impatient audiences and unsympathetic or irascible judges. We will not stay to inquire which condition fits a man for public speaking best, that of having sympathetic or unsympathetic listeners, for we conceive the answer to be precisely the opposite of what Mr. Lyttleton said, for he who addresses, for the first time, an unsympathetic audience, when accustomed to adulation for his oratory, generally receives a rude shock. But it is not a little odd that Mr. Lyttleton should think doctors have opportunities of learning the art of speaking superior to those of politicians and lawyers, for we should have thought it a platitude to say that the latter speak in public almost habitually, whereas the doctor rarely raises his voice, except at a cricket supper or old school dinner. One fact which undoubtedly delays many of the pressing reforms in the profession is the dislike medical men have to appear on public platforms, and their inability to make a good and lasting impression when they do so. It is the essence of a clergyman's profession to be glib if he cannot be fluent, and a barrister who cannot speak well and think readily "on his legs" will do but little good in the courts; to a politician such qualities are the breath of life. Some medical men are very good speakers, if not orators. Names will occur to everyone, but we may just cite the late Sir Charles Hutchinson in passing, but they are so by natural gift, and not by training. The inability of medical men to debate or speak tellingly in public when pitted against lawyers and politicians must have struck everyone with much experience of public meetings. The drawback is a real one, for people are apt to assume that the lawyer or politician has more behind him in the way of a case than the doctor. As a rule, it is quite the opposite, only the doctor has not the

faculty of presenting his view to the best advantage. And so medical reform hangs fire.

### The German Birth-Rate.

LIVING as we do in days of Teutono-phobia, when a large section of the population seem to have lost faith in the British race and approves of nothing that is not made in Germany, it does no harm for people who have faith in John Bull, and are not frightened into believing every balloon to contain emissaries from the Kaiser, to examine some of the claims made against their own country of degeneracy and loss of manhood. An interesting example of such inquiry is to look at the German vital statistics which are published this year in a separate volume on the movements of the population for 1907, with especial attention to the birth-rate. These figures show that the birth-rate fell to 33.2 per 1,000 inhabitants, as compared with 34.08 in 1906. The death-rate fell to 18.98, as compared with 19.20 in 1906. The excess of births over deaths was 882.624, as compared with 910,275 in 1906. The excess, however, of births over deaths was greater in 1907 than in any previous year except 1906 and 1902 (902,243). The decline in the birth-rate, which stood at 41.64 in 1877, 38.33 in 1887, and 37.17 in 1897, as compared with 33.2 in 1907, is now attributed to a falling-off in the number of births in every part of the Empire except Westphalia, and in Westphalia the number of births is not quite keeping pace with the total growth of population. The decrease in number of births in the whole Empire in 1907 was 23,766, or 1.1 per cent. In Saxony the decrease was 3 per cent., and East Prussia, West Prussia, and Pomerania show about the same percentage. A falling birth-rate is assumed by our economists to be a sign of national decay; so that it seems the great Armageddon (when it comes) will be a tussle between degenerates. Surely there are acmes of folly both in 'phobias and in economics.

## PERSONAL.

HIS MAJESTY THE KING, during his recent visit to Gloucester, gave permission for the title "Royal" to be prefixed henceforward to the name of the Gloucester General Infirmary, "in recognition of the admirable work done by those responsible for its management, and the devoted and successful efforts of its staff in the prevention and alleviation of human suffering."

THE opening ceremony of the new Manchester Royal Infirmary took place on July 6th, when the buildings were declared open by His Majesty the King, who was accompanied by Queen Alexandra.

HER MAJESTY THE QUEEN has given her approval of the proposed endowment of a bed in the York County Hospital in memory of the late Canon Fleming, and endorsed this with a personal donation.

THE Prince and Princess of Wales, the Duke and Duchess of Connaught, and Princess Christian gave their patronage to the Carnival, held on July 1st, at the Crystal Palace, in aid of the fund for the removal of King's College Hospital to South London.

LADY TATE has presented £1,000 to endow a bed in the Chelsea Hospital for Women.

THE retirement is announced from the post as Senior Surgeon to the Cancer Hospital, of Mr. Frederick Bowreman Jessett, F.R.C.S.

DR. J. S. PEARSON and Dr. J. C. Murphy have been confirmed in the offices of Medical Officer, West African Medical Service, Sierra Leone.

THE London Hospital Medical College Endowment Fund has received a gift of £2,000 through Dr. Luther Martin, an old student of the hospital.

DR. A. DE L. ROBINSON, who has been appointed Principal Assistant Medical Officer of Health, Colombo, Ceylon, has arrived in the Colony and assumed duty.

THE annual general meeting of the Asylum Workers' Association was held yesterday, at 3 p.m., at the Medical Society's House. Sir William Collins, M.P., presided.

SURG.-LIEUT.-COL. ROWLAND HILL COOMBS, of the 3rd Battalion Bedfordshire Regiment (Special Reserve), has been appointed a Deputy-Lieutenant for the County of Bedford.

DR. GIBBON FITZGIBBON, formerly Assistant Master at the Rotunda Hospital, has been appointed Gynaecologist to Mercer's Hospital, Dublin, in the place of Dr. Glenn, who has resigned.

THE sixty-eighth annual meeting of the Medico-Psychological Association of Great Britain and Ireland will be opened on the morning of Thursday, July 22nd, at the West Riding Asylum, Wakefield.

THE ceremony of laying the foundation stone of the out-patients' department of the Liverpool Royal Infirmary was performed on the 6th inst. by the Earl of Derby, G.C.V.O., C.B.

DR. A. E. IRELAND, Government Medical Officer, Grand Turk, West Indies, has been transferred to Fiji as Medical Officer of Health, and will be succeeded at Grand Turk by Dr. T. R. Robertson, District Commissioner and Medical Officer, Caicos Islands.

THE Forfarshire Medical Association held their annual dinner in the Royal Hotel, Forfar, on July 2nd. The chair was occupied by Dr. Leishman, Brechin, vice-president of the Association, and the croupier was Dr. Pirie, Dundee.

THE offices of Commissioner and Medical Officer of the Virgin Islands, which have been amalgamated for the past thirteen years, have now been separated on the transfer of Dr. R. S. Earl to the Falkland Islands, and Dr. T. Leitch Wilson becomes Medical Officer.

DR. W. WYNN WESTCOTT, J.P., coroner for North-East London, has recently been elected President of the Coroners' Society of England and Wales, and Mr. Walter Schröder, Deputy Coroner for Central London, has been reappointed Honorary Secretary of the society.

MR. HENRY T. BUTLIN, D.C.L., F.R.C.S., was elected on Thursday last to succeed Sir Henry Morris, Bart., as President of the Royal College of Surgeons of England; at the same meeting of the Council Mr. A. Pearce Gould and Mr. R. Clement Lucas were elected Vice-Presidents.

PROFESSOR ERNEST W. WHITE, M.B., has been elected Emeritus Professor of King's College, London, on his retirement, after twenty years' service, from the professorship of psychological medicine. The vacancy thus caused has been filled by the appointment of Dr. Robert Hunter Steen.

SIR ALAN REEVE MANBY, M.V.O., M.D., who has been appointed a Physician Extraordinary to the King, was formerly Surgeon-Apothecary to His Majesty's household at Sandringham, and to the Prince of Wales's household. He was the medical attendant of the Prince of Wales during his Colonial tour in 1901.

THE annual luncheon of the Continental Anglo-American Medical Society will be held on Thursday, July 29th, at Belfast, during the annual meeting of the British Medical Association. Members intending to be present should communicate with Dr. C. G. Jarvis, the hon. secretary, 81 Boulevard Malesherbes, Paris.

# A CLINICAL LECTURE

ON

## DIGITALIS AND DIGITALINE; WITH SPECIAL REFERENCE TO THEIR USES AND MODES OF ADMINISTRATION.

By PROFESSOR HENRI HUCHARD, M.D.,

Physician to the Paris Hospitals.

[SPECIALLY REPORTED FOR THIS JOURNAL.]

It is often asserted that crystallised digitaline is a dangerous drug because, although extremely powerful, it is not diuretic, and we are therefore urged to give the preference to digitalis in the form of a maceration or infusion of the leaves. It is now upwards of eighteen years ago since I first challenged this statement, and brought evidence before the Therapeutical Society to show that digitaline was really a diuretic, and two years later I showed at the Hospitals Society that it might be employed with advantage in renal affections, adding that digitaline was in reality less dangerous than digitalis.

We know, as a matter of fact, that samples of digitalis gathered in England, Scotland and America differ greatly in the proportion of active principles therein contained. Lauder Brunton long since showed that the same holds good of Indian hemp and certain other plants, the properties whereof vary within wide limits according to the climate, &c. As long ago as 1896 I pointed out that digitalis obtained from the Vosges is far more active than that growing in Auvergne or Brittany, and that even in the same locality—the Vosges or the Morvan, for instance—specimens of digitalis growing within a few hundred yards of each other varied in their properties according to the soil, exposure to sunlight, &c. Then, too, there are good years and bad years for digitalis, just as in the case of wine, and atmospheric influences may greatly reduce the proportion of active principles, while some samples of digitalis are proportionally richer in digitoxin and digitaline than in crystallised digitaline, which fact further explains their variability of action. The roots, stems, petioles and veins contain little or no active principle, which, on the other hand, is present in abundance in the seeds, and especially in the second years' leaves, gathered in June before flowering. Then, too, the leaves are often confounded with those of borage, comfrey and mullein, and still more frequently with those of *Coniza squarrosa*. Cultivated digitalis is almost inert, and even properly-prepared leaves require to be protected against light and damp, otherwise they lose their properties.

How can we hope to obtain a definite uniform product under such variable and multiple conditions? This enables us to understand the extraordinary difference in the doses recommended by various authors. In Edinburgh half a fluid ounce of infusion of the leaves seems to be well borne, and Petrescu used to give 3 or 4 drachms of the leaves in an infusion in the treatment of pneumonia, while in London an infusion of 60 to 80 grains caused merely a little gastric disturbance, yet in France we rarely venture to exceed 10 to 15 grains. The difference can only be explained by variations in the activity of the plant gathered in these countries respectively. Uncertainty as to the nature of a drug begets hesitation on the minds of the therapist. Let us take, for instance, a sample of digitalis improperly dealt with, so that the leaves which, under ordinary circumstances, would represent a milligramme of digitaline, each

gramme only contain a fraction of that amount. Under these circumstances, the inactivity of the drug will be attributed to advanced degeneration of the myocardium, whereas it is the drug that should be incriminated. Let us go a step further and imagine that, on the strength of our experience of the innocuousness of an almost inert sample of digitalis, we prescribe similar doses in another case. This time we happen to alight upon a normal preparation, in which event our patient will be exposed to the risk of poisoning, in spite of the same dose having been given.

The conclusion to be drawn from what precedes is that we ought to give the preference to a product which has a well-defined, and therefore invariable, chemical composition, with consequent uniformity of therapeutical action—viz., crystallised digitaline.

Digitaline is insoluble in water and digitalis is slow in its action, is eliminated very gradually, and tends to accumulate in the organism. We are asked to regard these characteristics as so many defects, but I maintain, on the contrary, that they are qualities; indeed, without them digitalis would be comparatively valueless.

To begin with, its action is not as slow as we are asked to believe, and we must distinguish between the cardiac and the diuretic actions. The cardiac effect is rapid, being manifested in from a quarter to half an hour, or an hour at the outside, as will be seen in cases of paroxysmal tachycardia or palpitations due to cardiac erythmism. The diuretic effect is slower to manifest itself, and we may have to wait twelve, twenty-four, or even forty-eight hours for it to show itself.

We must never lose sight of the dissociation of these two sets of effects, for this means that in certain well-defined clinical cases the action of digitalis remains purely cardiac, and the dose must not be increased in order to obtain a diuretic action, which is not to be expected in the absence of oedema awaiting absorption. This, too, explains the occurrence of poisoning by digitalis, an accident which can always be avoided with proper care, digitalis being by no means the "dangerous" drug that it is asserted to be. No doubt it is dangerous *in posse* when handled by the inexperienced, but it is uniformly innocuous in the hands of those who have learned to use this, the most powerful arm in the therapeutical arsenal, of those, in short, who know how to convert these alleged drawbacks into positive advantages.

The slowness of elimination, which means continuity of action, and the tendency to accumulation, which means reinforcement of the action, I turn to advantage in prescribing what I term the cardio-tonic dose—i.e., a tenth or a twentieth of a milligramme of crystallised digitaline. This is continued for several weeks in cases of heart disease at the stage of premonitory hyposystole. In this way, precisely on account of, and thanks to, the slowness of elimination and the tendency to accumulate, due to its insolubility, I can rely on its action, and am free from any apprehension of mischief. This slowness of elimination and prone-

ness to accumulate are two major qualities, because they ensure the organism remaining impregnated with the drug for long periods of time, which is not the case with drugs that are rapidly got rid of *via* the kidneys or other emunctories.

Moreover, accumulation can hardly take place with the minute doses just mentioned, since the drug is broken up in the organism from day to day. A reservation must be made in regard to patients confined to bed, because digitaline is more readily decomposed when patients are up and about than when they remain in the horizontal position. This is not to be explained on the assumption of orthostatic congestion of the kidney, the influence of which has been thoroughly investigated by Lenossier and Lemoine. These observers demonstrated that in the erect position the excretion of water, solids and urea is reduced, and we may even get albuminuria should the kidneys not be in good working order. In the case under consideration the orthostatic factor cannot be invoked, for the digitalis is destroyed in the tissues by movement and walking.

Since the slowness of elimination and the tendency of digitaline to accumulate are advantages rather than drawbacks, inasmuch as they ensure continuity and automatic reinforcement of its action, it behoves us to beware of the various pseudo-digitalines, the claims advanced on behalf of which are based precisely on their alleged solubility, rapid elimination and absence of accumulation. We must hold aloof from products which we are asked to regard as substitutes for the French crystallised digitaline; I mean more particularly Smiedeberg's and Kiliani's digitoxins, which, as Houdas remarks, "are not products possessed of a constant, well-defined composition," and which, under a very appropriate name, furnish evidence in abundance of a really dangerous degree of toxicity. Another digitoxin, possibly even more dangerous than the others, is that isolated by Cloetta, at first known as *digalene*, the inconstancy of action of which I have myself had occasion to observe. Yet Dr. J. B. Renaud, who advocated the use of this substance, continues to recommend it, although he ingenuously admits that it is a product which "does not appear to be well-defined and distinct from the other active principles obtained from digitalis." It is not easy to explain how an ill-defined drug which is soluble, rapidly eliminated, and does not tend to accumulate, can be even remotely compared with digitalis, which exerts a quasi-specific action. This digitoxin is anything you please except digitaline; indeed, it is not even digitalis, as we understand it, with its alleged defects which, on the contrary, are to be regarded as valuable qualities. The second conclusion, therefore, is that of all the active principles crystallised digitaline is the one to be preferred.

On the strength of more or less numerous experiments on animals, certain observers venture to assert that the action of given medicinal agents is "identical." This conclusion is certainly false, as far as digitalis is concerned. As I have pointed out on several occasions, there is great risk of error in arguing from experiments on animals to man, instead of from the healthy man to the sick man.

Even if it could be shown that digitalis acts on the vagi and not on the myocardium and vessels, or that it acts first on the peripheral heart, and then on the central organ; nay, even if we were to admit the three or four modes of physiological action described by Traube as appertaining to digitalis, there is one thing that can never be explained nor demonstrated by such experiments—viz., the difference between the action of digitalis on a healthy man and on one who is suffering from

heart disease, and between its action on the latter at two different stages of his cardiopathy. For instance, at the stage of eusystole or confirmed asystole with oedema, in the first case we only obtain a feeble cardiac action and no diuretic action at all, whereas in the second we get very marked cardio-vascular and diuretic action. This fact justifies the conclusion that the physiological action of the drug, especially of digitalis, must be studied not only in animals, but also and more particularly in the sick; indeed, as I have already pointed out, clinical medicine is essentially the study of the physiology of the disease, of the patient and of the drug.

Doubtless we must first of all ascertain the physiological action of the drug in animals, but we must bear in mind that experiments are only artificial observations, that in experimental deduction the experimenter cannot be separated from the observation, as Claude Bernard used to say, and that the physiological study of drugs, begun on animals, ought always to be continued at the bedside by clinical observation, which amounts to spontaneous experiment.

I would add that although it may be possible to determine experimental valvular and myocardiac lesions, or, for the matter of that, renal lesions, no one has yet succeeded in provoking a cardiac lesion with its asystolic syndrome. It follows that there is a physiology which must be studied in the sick, and this proves once again that clinical observation and physiology must co-operate and mutually assist each other.

I am never tired of repeating Pecholier's words, that "every drug comprises several drugs"—i.e., that in clinical physiology the same drug exerts a different action when given in different doses. Now there are three ways in which we may prescribe crystallised digitaline in response to three special indications in disease, especially in heart disease:—

1. *Massive Dose*.—This is the anti-asystolic and diuretic dose. In presence of asystole we may order as much as 1 milligramme of crystallised digitaline once or twice a day—a very good plan and the one adopted by Potain. In thirty-six or forty-eight hours there is profuse diuresis with strengthening of cardiac-contraction, absorption of oedema, diminution or disappearance of visceral congestion, and enhanced elimination of the chlorides. Should the effect fall short of our requirements, we may, indeed, ought to, repeat the drug a week or two later in the same or a rather smaller dose— $\frac{1}{2}$  to  $\frac{3}{4}$  milligramme. When the diuretic action has exhausted itself, as shown by the disappearance of the oedema, should cardiac contraction still be weak, we ought to prescribe, in ten days or a fortnight, for one, two or even three weeks, crystallised digitaline in very small doses (the cardio-tonic dose), as will be shown later.

2. *Small Dose*.—This is the sedative dose indicated for the relief of palpitation, cardiac erythmism and dyspnoea associated with mitral stenosis, even during the period of perfect compensation. We may give a  $\frac{1}{4}$  milligramme granule for three or four days, to be repeated every three or four weeks. This plan is very useful in the dyspnoea of mitral stenosis by determining an actual prolongation of the diastolic period—i.e., the period during which the heart is being filled. And this in spite of the fact that Potain asserted digitalis to be absolutely contra-indicated in mitral stenosis, because in this disease, he says, "the heart is tuned for a small amount of work, and digitalis increases this work." This is a grave error, for if the drug really had for effect to increase the work of the heart, its use would never be indicated in any form of heart disease in which, on the contrary, it is our duty,



as in lesions of any organ, to lighten, relieve and facilitate its work, which is exactly what digitalis does. Moreover, clinical experience and observation are there to prove the excellent effects of digitaline in mitral stenosis, which is possibly the only form of fully compensated heart disease in which the drug is really indicated.

3. *Very Small Dose.*—This is the maintenance or cardio-tonic dose, the one that exerts a purely cardiac, non-diuretic action which can be persevered with for weeks and months, allowing an interval of repose of a week or two every fifteen or twenty days. It has for object and result, in daily doses of 1-10th milligramme, to reinforce the heart without the least risk of the supervention of even the slightest symptoms of intoxication, since, on account of its slowness of elimination, a certain quantity of the drug remains in the organism and exerts its tonic effect on the myocardium.

In urgent cases crystallised digitaline may be injected subcutaneously without giving rise to any local irritation. We are indebted to Rosenthal, Martignac and Lasnier for this injectable digitaline, which is an oily solution obtained by the aid of a rather high temperature, containing a  $\frac{1}{4}$  milligramme in each cubic centimetre, as suggested by me. The injection of digitalised oil, which causes very little pain and is promptly absorbed, is of advantage, in that the drug acts more rapidly, and the risk of setting up gastric intolerance is obviated without exposing the patient, as was at one time believed, to any greater liability to toxic symptoms.

If I have succeeded in making myself understood, no hesitation or apprehension will be experienced in administering digitaline in accordance with the definite rules which I have briefly laid down. In the doses recommended every therapeutic indication can be fulfilled, and we cannot too often repeat to ourselves the words of an Italian physician of the sixteenth century (Cappiovaccio, of Cremona):—"Learn how to prescribe remedies, and you will complain less of their inefficacy and their dangers."

I will conclude with the general precept that Nativelle's crystallised digitaline is almost invariably to be preferred to the various preparations of digitalis. Just as there is no substitute for digitalis, so there is none for crystallised digitaline. Schmiedeberg's and Cloetta's digitoxins are untrustworthy and even dangerous, and under no circumstances can they take the place of crystallised digitaline.

This is all we need to know, and this my rather extensive experience enables me to affirm. I trust I have satisfied my readers that the dangers of digitaline and the drawbacks of digitalis are non-existent, and I hope I have inspired them with that confidence in themselves when making use of this invaluable agent, without which there can be no such thing as therapeutics.

**NOTE.**—*A Clinical Lecture by a well-known teacher appears in each number of this journal. The lecture for next week will be by Dr. T. D. Lister, Physician to Out-Patients, Royal Waterloo Hospital for Children, and Physician to the Mount Vernon Hospital for Consumption and Diseases of the Chest. Subject: "Infantile Scurvy."*

FORTY-THREE recent cases of scarlet fever attributable to a certain milk supply have been reported to the Westminster City Council.

IN a report on the work of the Central Midwives Board for the past twelve months, it is stated that the midwives' roll has increased by 1,647 names, the total on March 31st, 1909, standing at 27,281.

## ORIGINAL PAPERS.

### MYOTONIA ASSOCIATED WITH MUSCULAR ATROPHY AND MYASTHENIA.

By PROFESSOR CHVOSTEK,

Vienna.

[SPECIALLY REPORTED FOR THIS JOURNAL.]

IN a lecture to the members of the Gesellschaft für Innere Medizin, Chvostek endeavoured to show the close relationship that existed between myotonia, muscular atrophy, and myasthenia, and affirmed that the cause was hæmopoietic or glandular in its origin. Myotonia congenita carries us back to the days of Thomsen, who first described the disease in 1876 as hereditary and congenital, although it was previously noticed by Charles Bell in 1832, and later by Leyden in his "Klinik der Rückenmarkskrankheiten" for 1874. Seebigmüller, Strümpell, Bernhardt, Eulenburg, and Erb confirmed the Thomsen disease as a typical malady, and classified it, according to their knowledge of the disease at the time, myotonia congenita. Later it was discovered by Süsskand and others that no clear hereditary proof could be shown in many cases, which led to a new term, myotonia acquisita. These cases were observed to commence between the ages of twelve and sixteen years, beginning with psychical and somatic disturbance. Although Thomsen had proved the heredity in his own cases for five generations, Talma and Jolly now demonstrated that the disease appeared in isolated families at adolescence.

The symptoms were described as tonic contractions and stiffness in the voluntary muscles when any effort was attempted after a state of rest, but after the function was once restored all the functions of the body seemed normal. The extremities were the usual site of the phenomena. Rising from a chair, the patient found himself locked, and had to wait on a process of thawing before he could move, but once relaxed, he had no more difficulty that day till he rested again. It does not seem to interfere with the endurance, as these patients can undergo long, tedious, hard labour without feeling tired. If the arms, fingers or legs be firmly flexed the same stiffness may be produced. Writing and piano-playing induce the rigidity, or bending the arm with a glass of water will lock the hand to the glass in the flexed position till he relieves it with the other hand.

The muscles are usually well nourished, having no appearance of dystrophia, but any irritation of the nervous system or cutaneous surface may produce this locking in any muscular group.

Electrical examination is of little value when the current is light, but the myotonic action is produced when a very strong current is used by long and slow waves in the muscular bundle, lasting from a quarter to half a minute, and in many cases to three minutes. This description is more peculiar to an intense faradic current. The galvanic current has not the same tardy effect, but the anode closure is abnormally lighter than the cathode closure, while the latent interval is greatly increased. Erb discovered rhythmical waves in muscular groups passing between the cathode and anode when 20 milliamperes were used.

The myotonia, though easily recognised in simple cases, is often associated with epilepsy, hysteria, hemiplegia, etc., but the absence of atrophy is usually acknowledged as diagnostic, and when this is present, as in the case before you, associated with myasthenia, the confusion is in-

creased. If you examine this case carefully you will find the fatty substance has almost disappeared, although the patient has been well nourished, but, owing to the irregular movement in the alimentary canal, assimilation has been interfered with. Both testes are atrophic and the small bones of the larynx are greatly enlarged. The Röntgen photos of the cranium show a greatly increased cavity in the pterygoid bone, and therefore contraction of the sella turcica. The struma are moderately developed, but atrophy is present in almost all the muscles of the body, and particularly prominent in those of the temporal and masseter regions, where luxation of the lower jaw frequently takes place when the patient opens the mouth. There is also atrophy of the tongue, paresis of the fauces, and feebleness in the muscles of the neck. The atrophy is pronounced in the cucullaris and sternocleidomastoid muscles, with weakness of the rhomboid. The deltoids are also atrophied, but the right more than the left, the contractions of the latter being longer, and thus presenting a pseudohypertrophy. The atrophy of the muscles of the upper and lower extremities are more pronounced in the gluteal than in the hand, thus producing a weakness in fixing the pelvis or extending the legs; the left being more marked than the right. No fibrillary movements are present in the deeply-affected muscles, but small fasciculæ may be observed here and there. The tendon reflex as well as the periosteal, is lost in both upper and lower extremities. When attempting to grasp any object the "intentions" of cramp are pronounced, and the movement of the legs is plastic, with stiffening of the eyelids after closure. The myotonic phenomena disappear after repeated movements, which may be easily demonstrated in the tongue, quadrangularis menti, biceps, thenar and anti-thenar muscles, and in a lesser degree in the deltoids and quadriceps cruris.

The electric examination reveals the myotonic reaction distinctly in the right biceps, quadrangularis menti, and the muscles of the thumb, though absent in the triceps and extensors of the forearm, the right quadriceps, and muscles of the calf of the left leg.

These results reveal extensive changes in the muscles resembling dystrophia, but there is no proof of spinal muscular atrophy, syringomyelia or tabes being present, and, from the same reasoning, neurotic changes are absent. Although the sensibility is disturbed, it is more functional than real, owing to the changes in the skin, the loss of fat and other alterations in the nerve system. By the same reasoning the absence of myotonia may be demonstrated. The myasthenic symptom, in rapidly becoming tired and exhausted, may be due to the loss of muscular substance, and is not easily explained.

From these facts and phenomena we learn that myotonia is not a simple primary muscular disease, although there are congenital anomalies at a very early period of its history, but many of the manifestations gradually develop during the course of a long disease. We must, therefore, look further for a deeper-lying disturbance than muscles, teeth and hypertrophy, which have been frequently the source of careful examination, and found untenable as the real source of the disease. From the number of typical cases that present themselves, and the different courses that the disease take, Pelz has come to the conclusion that myotonia and muscular atrophy are one and the same thing; and from the symptoms associated with them, such as the loss of fat, distribution of the blood-vessels and psychical cases, epilepsy, altered blood-vessels and metabolism, are all in favour of a central disease. No

doubt the myotonia has much to commend itself as a central disease from the frequency of associated wasting of the muscles, and differing from general changes present. From these symptoms Schieferdecker has evolved another theory of sarcoplasma, in consequence of fibrillary disease, hypertrophy of the muscular fibres and changes in the nerve ganglia, which he looks upon as secondary; but this theory is as difficult to understand as many of the others, as a simple stroke, according to Kornfeld, will induce the myotonia. Hoffmann is inclined to believe in this theory and that the myotonia is lying latent in the muscle, and only requires this stroke to produce the morbid manifestation. The congenital theory has long been maintained, and, from its resistance to all forms of treatment, has been accepted as the most plausible, though some mysterious change is undoubtedly present in the muscles, but when the whole symptoms are viewed consecutively, we must confess that the disease is more remote than muscles and plasma, and appears to belong to the blood glands or blood formation. In support of this view, the various phenomena, without any clear explanation, force us to believe that the disease lies deep in the hæmopoietic system. Myotonia is not unusual after extirpation of the thyroid, and in the case before us we have atrophy of the testes, an early appearance of bone formation in the larynx and thorax, and general wasting, to support the belief in the blood glands being the remote source of the disease. Again, the myotonic reaction in children and the hibernation of animals favour the same argument; hence the close relationship between tetany and myotonia which is acknowledged by many. Although we have no direct proof of tetany and myotonia being manifestations of the same morbid change, we have strong circumstantial evidence that the epithelial bodies of the thyroid with the "chromaffinity system" are the real proximate cause of the disease, modified, of course, by the influence of the sympathetic system on striped muscular tissue. This may explain the impotence of treatment and the hopeless results hitherto obtained.

## THE PREVENTION AND TREATMENT OF MALARIA IN TROPICAL COUNTRIES. (a)

BY MAJOR RONALD ROSS, C.B., D.Sc.Dub.,  
F.R.C.S.Eng.,

Professor of Tropical Medicine, University of Liverpool.

EVERY sanitary officer who desires to reduce malaria in the district committed to his care is sure to be confronted from the outset by a large number of difficulties with which, perhaps, he does not know exactly how to deal. Let us ask ourselves what we should do if we were put in the place of this sanitary officer—whether he be the sanitary administrator of a country, a colony, or a state, or the health officer of a city, town, a station, or a rural district. Malaria is due to a miasma given off by the marsh; but the miasma is not a gas or vapour—it is a living insect. The germs of malaria do not live in the marsh; it is the carriers of the germs which live there. The Anophelines themselves are the malarial miasma. The careful thinker may, however, still ask whether science may not be mistaken in this matter as she is said to have been mistaken in others. Only those who have studied the subject can reply. We have to deal here with a large body of observations made by many workers. Every phase of the parasites, both in the vertebrate and in the insect hosts, has been minutely figured and described over and over again, and numerous experimental infections have been achieved.

(a) Abstract of Paper read before the *Materia Medica* Section, Indian Medical Congress, Bombay, Feb. 22nd, 1909.

Wonderful though it is, the life-history of the parasites of malaria is simply the same in general as that of numbers of other well-known parasites. Lastly, the disease has been abruptly cut short by measures based on these results. This accumulated mass of evidence is based, not on mere empirical opinion—to which most of the errors falsely attributed to science have been due—but on a secure microscopical and experimental foundation.

The next question is this one: Will the campaign repay the money and trouble likely to be spent upon it? There are two columns to this account. The cost of the campaign is often discussed, but not so frequently the cost of the disease. Take, for example, the case of a military station. Every man on the sick list means a loss to Government of so many days' pay, and every man invalided to Europe or to the Hills means an addition to the cost of transport. Every death means the loss of a trained soldier—that is, of all the money spent on his training—and an unhealthy station spells a large hospital and an expensive medical staff. But I fancy that these expenses are small compared to the cost of the disease during active service. Malaria is essentially a relapsing malady. A man once infected and not thoroughly cured is likely to suffer from relapses when exposed to fatigue (as proved in several ways). What happens, then, when a regiment "soaked with malaria" goes down out of barracks on service? In such a case a large percentage of the strength is probably infected before starting—with the result that man after man "goes down" with fever when subjected to the hardships of war, and many have to be invalided. Add to this the number of men infected *en route*, and we shall understand how great the cost of military expeditions in the Tropics must be enhanced by the disease—not to mention the loss in military strength. Similarly, in civil towns and stations, we must reckon up the cost of sickness and invaliding among the employees of the State, from the highest officials to the staff of sweepers and the gangs of workmen in the streets. In plantations the cost is often quite crippling to the planter, since from 5 to 20 per cent. of the indentured coolies may sometimes be laid up daily during the busiest seasons. What the cost may be to the general civil population cannot be exactly estimated, but it must be gigantic.

The measurement of malaria in a district will cost Government little or nothing beyond, perhaps, the ordinary travelling expenses, and will involve but small additions to the work of officials. The measurement being completed, the sanitary department is now in a position to commence the campaign, if such is decided upon, without further investigation. I say so advisedly for reasons which will appear presently.

Fortunately, we have many weapons against malaria, and they have been so frequently described and discussed that it is unnecessary to labour the point here. They may be classified as follows: (a) parasite reduction by the use of quinine; (b) mosquito reduction by drainage and other means; (c) subsidiary measures such as wire gauze segregation, public instructions, etc.; but after ten years' experience we may, I think, venture to lay down without further discussion the following rules regarding the special applicability of each:—

(1) All anti-malaria measures are good and useful, and each should be employed in its proper place.

(2) For cities, towns, large stations and other dense populations, mosquito reduction will probably be the most appropriate measure, because in such, (a) the cost of drainage benefits a large number of people and can be better borne by them; (b) its cost will probably be less than the cost of effective quinine distribution among so many; (c) the measure will tend to remove other diseases and annoyances besides malaria, and (d) it can be carried out by the authorities on their own initiative without making demands on the populace to take drugs, use mosquito nets, and so on.

(3) For scattered populations, small villages, and rural areas we must generally fall back upon quinine, because the cost of drainage (which is as great or greater in the country as in the city) is likely to accrue from it.

(4) In the presence of severe malaria, both mosquito reduction and parasite reduction should be employed

together, and the subsidiary measures are to be used in special cases.

In considering this list, the sanitary officer will always ask: Where is he to begin? What must he do first? The answer may be put in the form of the fifth rule:—

(5) Begin with those measures which can be immediately adopted—that is to say, as a general rule, with the cheapest ones.

We know that native children are the principal homes of the parasites of malaria. Now most tropical countries are advanced enough to possess numerous schools—either supported entirely by Government or assisted by "grants-in-aid." These can be utilised at once, without any delay, for a double purpose—(1) for the treatment of sick children, and (2) for the continued measurement of malaria. I have recommended the following procedure for Mauritius:—

(1) Every schoolmaster should keep a "Spleen Register" of the children in his care. (2) Every school should be visited on any convenient date once a quarter, either by the sanitary officers, or by trustworthy medical assistants. (3) The inspector should examine as many of the children as possible at each inspection, and should note in the register, opposite the name of each, whether he is suffering from enlarged spleen or fever, and what dosage of quinine should be given to him during the next three months. (4) The master should endeavour to carry out his directions to the best of his ability by giving the drug as ordered. If you wish to influence the disease seriously by quinine, you must deliver it at the houses of the poor, either for nothing or for a very small payment. This is not really expensive, and we should proceed as follows:—Select the most malarious area at hand, and appoint a trustworthy dispenser for the work. Give him a large wallet full of assorted quinine pills and direct him to deliver them from house to house to all who wish to take them. Moreover, enough of the pills to suffice for daily dose (say, 5 gr. for the adult) during a fortnight should be given. In this way the dispenser can visit any fifty houses a day, and as he need visit each house only once a fortnight, he can generally deal with 500 or 600 houses. A large and severe epidemic at Phoenix, in Mauritius, was absolutely cut short in two months last year by this procedure, combined with drainage. For the whole of Mauritius, with its population of 375,000, and its spleen rate of 34 per cent., I advised five such dispensers, costing only Rs.6,000 per annum, exclusive of the quinine.

On consideration, I think that this organisation (as regards schools and dispensers) practically sums up what can be usefully done in the way of public quinine prophylaxis in the Tropics. My estimate for the cost, preparation and distribution of quinine in Mauritius was Rs.33,600 per annum, but that island possesses many planters' dispensaries. A wider distribution, as at Panama, will, of course, cost much more, but not every district has such funds at its disposal.

With swarms of carriers in every direction it is as difficult to put down the disease as it would be to put out a fire so long as someone else continues to relight it.

Complete extermination of the insects is never demanded, and a diminution is sufficient. We can have no misgivings as to this conclusion, because every year Nature makes the experiment before our eyes in the simultaneous decline of malaria and Anophelines together at the end of the rainy season. The second main theorem is that by the laws of chance, however far an insect may occasionally wander from its breeding place, the majority of insects bred there will tend to remain near it. A puddle near at hand may cause as much mischief as a large marsh a mile away. Other points of importance are (1) that, as the same organisation suffices to deal both with the Anophelines and the Culicines, we may as well include the latter in the campaign; and (2) that, following the general principle recently suggested, it is always advisable to begin by attacking the smaller breeding places—in other words, "minor works before major works." Before committing the State to the expense of draining large marshes, see what can be done by removing the small collections of water near houses.

The organisation now described is that which has been recommended for Mauritius: (1) The head of the Sanitary Department can always organise the preliminaries of the campaign, such as I have outlined above, by himself; but will need a special assistant when the work develops. For a single town or station, a trustworthy sanitary inspector, placed under the local sanitary authority, ought to suffice; but a colony or province will require a well-qualified medical man, zoologist, or, perhaps, engineer. His duties will be to direct and supervise all the operations, under the head of the Sanitary Department; to collect the statistics, and to prepare the annual malaria report (which will be suggested presently). I conclude that this official is absolutely necessary if continued success is desired. Without him, efforts are likely to be only spasmodic; the campaign may be abandoned after a time; money will be wasted, and the whole business will be discredited. In fact, this is just what has happened in several cases—an energetic medical officer has commenced a campaign, which has been dropped on his leaving the station.

(2) Under the special "malaria assistant or director," it is necessary to appoint a certain number of intelligent subordinates, who may be called "Malaria Inspectors" (an excellent name used in Mauritius, and suggested by Colonel Peterkin, R.A.M.C., is *moustiquier*). Each man, after a sufficient training in the habits of mosquitoes and allied matters, is placed in charge of a given area of, let us say, ten square miles, more or less. His principal duty is to seek out and know the breeding places of all kinds of mosquitoes within that area; but he must also keep an eye on the working gangs, become well acquainted with the houses and villages, guide the quinine dispensers, and, in general, be the lieutenant of the "malaria director" within the area allotted to him.

The actual labour should be performed, workmen organised in small "malaria gangs" of by about three men each. One of the men should be the head man of the gang, and receive a little higher salary; he should direct the others, but must also do manual work himself. The men should be of the gardener class, accustomed to labour on the soil. Each gang is allotted a given area, within which they must constantly carry on all the necessary "minor work"; that is, clearing water channels and dams, rough-training streams, dumping in holes and pits, and training small marshes, waste waters, and so on. In the dry weather their attention is turned largely to the tins, bottles, and other rubbish, the examination of cisterns and tanks, filling of holes in trees, etc., in fact, all the well-known anti-mosquito work. As I have frequently urged, these gangs make an invaluable addition to the ordinary staff of the Sanitary Department.

The procedure and organisation which I have attempted to sketch out is mainly that recommended for Mauritius, but this does not mean that it is by any means an organisation suitable only for that island. In fact, all the details have simply been selected and developed by the chief medical staff of Mauritius, and by Major Fowler and myself from similar details of the campaigns conducted in Sierra Leone, Panama, Ismailia, Federated Malay States, Ceylon and elsewhere. Any further hints on the various points raised, or notes of actual experience in the field, would be of assistance in further developing this vital matter of organisation.

## THE POISONS AND PHARMACY ACT, 1908, IN RELATION TO PUBLIC HEALTH AND SAFETY. (a)

By H. WIPPELL GADD, F.I.C.,

Of the Middle Temple, Barrister-at-Law.

THE safety of the public has been the keynote of all Acts of the Legislature of this country restricting or regulating the sale of poisons. "Whereas the unrestricted sale of arsenic facilitates the commission of crime" runs the preamble to the Arsenic Act, 1851, the earliest statute dealing with such matters.

(a) Abstract of Paper read before the Medico-Legal Society of London, June 22nd, 1909.

"Whereas it is expedient for the safety of the public" begins the Pharmacy Act, 1852, and in the self-same words opens the preamble to the Act of 1868.

It is not merely, however, with the distribution of poisons, as such, that pharmacy Acts deal; they regulate also (indirectly and imperfectly, it is true, but still usefully) the dispensing and retailing of many of the medicines required for or desired by His Majesty's subjects.

They have created an educated class of workers, possessing a sense of responsibility engendered by their training, and have thus brought about a great improvement in the purity of drugs and the accuracy of dispensing.

Such legislation has, therefore, a profound influence upon the public health, and cannot fail to be of interest, not only to jurists and physicians, but also to statesmen and philanthropists; whilst it should particularly appeal to medical officers of health, coroners, and all who have official charge of sanitary matters, or have to inquire into the causes of disease, accident and death.

It is not my purpose to-night to say much about Act 31 and 32 Vic., Chapter 121, generally known as the Pharmacy Act, 1868, by which these matters have, up to April 1st of the present year of grace, been controlled, except in so far as it is necessary to refer to it to explain the provisions of the new statute, the Poisons and Pharmacy Act, 1908, 8 Edward VII., Chapter 55, by which it has been modified in some important respects.

There is no preamble to this latter Act, no expression of concern for the safety of the public, no statement that the ready accessibility of poisons leads to crime. The omission is, perhaps, insignificant, and in accordance with modern methods of draftsmanship, but it is certainly discreet, in view of some of the provisions of the Act, and the genesis of the agitation which caused them to be enacted.

Coming, therefore, at once to Section 1, Sub-section 1, we read:—"Schedule A to the Pharmacy Act, 1868, which specified the articles to be deemed poisons within the meaning of that Act, is hereby repealed, and the schedule to this Act shall be substituted therefor."

I may remind you that the sale by retail in Great Britain of articles in Schedule A of the Pharmacy Act, 1868, is restricted to persons who are registered chemists or registered medical practitioners, and that the scheduled poisons are divided into two parts.

The requirements on retail sales of poisons, both in Part I. and in Part II. of the Schedule are briefly: As to poisons in both parts, the vessel, wrapper, or cover containing them must bear a label distinctly stating—

- (a) The name of the article.
- (b) The word "Poison."
- (c) The name and address of the seller—that is, the proprietor of the business.

Further, no poison in Part I. may be sold to any person unknown to the seller, unless he or she is introduced by some person known to the seller, and on every sale of any Part I. poison, the seller must, before delivery, make, or cause to be made, in a book to be kept for that purpose, commonly called "The Poisons Book," an entry of—

- (1) The date of sale.
- (2) The name and address of the purchaser.
- (3) The name and quantity of the article sold.
- (4) The purpose for which it is stated by the purchaser to be required.

A number of changes are introduced in the present Act, and may be seen on reference to the Schedule.

Section 1, Sub-section 2, reads:—"The Schedule to this Act may be amended by adding thereto or removing therefrom, any article or by transferring any article from one part of the schedule to the other in the manner provided by Section 2 of the Pharmacy Act, 1868, for adding to the list of articles deemed to be poisons within the meaning of that Act."

The procedure referred to is the passing of a resolution by the Council of the Pharmaceutical Society declaring that any article in such resolution named ought to be deemed a poison within the meaning of

the Act, with the subsequent approval of the Privy Council and advertisement in the *London Gazette*.

It has not always been easy to obtain the addition of substances to the list of poisons, the Council of the Pharmaceutical Society having submitted the names of many drugs to the Privy Council, from time to time, without success.

#### REGULATION OF SALE OF CERTAIN POISONOUS SUBSTANCES FOR AGRICULTURAL AND HORTICULTURAL PURPOSES.

Sec. 2.—(1) "So much of the Pharmacy Act, 1868, as makes it an offence for any person to sell or keep open shop for the sale of poisons, unless he is a duly registered pharmaceutical chemist, or chemist and druggist, and conforms to the regulations made under Section 1 of that Act, shall not apply in the case of poisonous substances to be used exclusively in agriculture or horticulture for the destruction of insects, fungi, or bacteria, or as sheep dips or weed killers which are poisonous by reason of their containing arsenic, tobacco, or the alkaloids of tobacco, if the person so selling or keeping open shop is duly licensed for the purpose under this section by a local authority, and conforms to any regulations as to the keeping, transporting and selling of poisons made under this section, but nothing in this section shall exempt any person so licensed from the requirements of any other provision of the Pharmacy Act, 1868, or of the Arsenic Act, 1851, relating to poisons: Provided that His Majesty may by Order in Council amend this provision by adding thereto or removing therefrom any poisonous substance, and, upon any such Order being made, this provision shall have effect as if the added poisonous substances were included therein, and the removed poisonous substances were excluded therefrom.

This clause makes a notable exception to the principle laid down in the Pharmacy Act, 1868, that poisons shall only be sold by persons who have been specially trained.

For the first time since there ceased to be Free Trade in toxic articles can poisons in the legal sense—that is to say, substances included in the Schedule of the Pharmacy Act, be sold by persons other than registered chemists, and druggists, and medical practitioners, and it is to this innovation that I wish to particularly direct your attention to-night.

What was the genesis of the concession? It was alleged, doubtless with truth, that in the Highlands and Islands of Scotland, where sheep farming is the principal industry, farmers are sometimes fifty miles and more distant from the nearest registered chemist and druggist, and therefore are inconvenienced in the conduct of their industry.

It was further alleged that the sale of poisonous preparations for use in horticulture was not sufficiently fostered by the chemists and druggists, and that in Kent inconvenience had been caused to growers and nurserymen.

The wail of the market gardeners over their not very serious grievances was reinforced by more clamorous cries from manufacturers of attractively produced poisonous proprietary preparations for horticultural purposes, compounds of arsenic and honey, and the like, the sale of which, they alleged, doubtless with much truth, chemists and druggists did not promote as zealously as they might have done.

The fact is, that a chemist and druggist is trained to regard the sale of poisons with disfavour. He, alone amongst traders, with the possible exception of the better-class publican, often persuades his customer to buy less than he wishes of dangerous substances, and, indeed, constantly declines to sell at all things which might bring him an immediate pecuniary profit, but the indiscriminate distribution of which would be detrimental to the common weal.

Moreover, the policy of the Pharmaceutical Society, which is the prosecuting authority for breaches of the Pharmacy Act, has ever been to refrain from interfering with legitimate transactions which might be technically illegal. It has allowed manufacturers to supply sheep dips direct to farmers without let or hindrance, and has taken a liberal view of the meaning of wholesale dealing and the law of agency.

However, a Departmental Committee appointed to

consider these matters reported, in November, 1902, *inter alia*, that, in their opinion, preparations for use in connection with agriculture, horticulture, or sanitation, might be placed in a third part of the schedule, to be sold only by licensed vendors and subject to regulations to be made by the Privy Council; and, after a somewhat lengthy interval, these suggestions have crystallised into a concrete form in Section 2 of the Act of last year.

It will be noticed that the licence is a personal matter, and it is doubtful if it can, therefore, be granted to a partnership or body corporate, as such, although doubtless it may be granted to the individual partners or to an officer or servant of the body corporate.

Further, it will be noticed that nothing in this section is to exempt any person licensed thereunder from the requirements of any other provisions of the Pharmacy Act, 1868, or of the Arsenic Act, 1851, and it is submitted therefore that every sale must be personally conducted, or at least superintended by the licensee, in accordance with the judgment pronounced by Hawkins J. in "*The Pharmaceutical Society v. Wheeldon*," 1890, 24 Q.B. 682, wherein he said:—"The whole object of the Act would be frittered away, and the Act itself become a dead letter, were we to declare by our judgment that an unqualified assistant can lawfully and with impunity sell any of the poisons to which the Act applies, unless upon every occasion of such sale he acts under the personal supervision of a qualified employer, or a qualified assistant to such employer. By such personal supervision we mean, not mere presence in the shop or room where the sale takes place, but actual personal supervision."

It is submitted that a qualified person for the sale of these poisonous substances now means either a registered chemist and druggist, or an individual licensed under this section.

One more point may be noted in passing, that, although at present licences can only be granted for the sale of preparations of arsenic and tobacco, and the alkaloids of tobacco, it is provided that other poisonous substances may be added to the list, not by the circuitous process provided by Section 2 of the 1868 Act, which I have already outlined, but by Order in Council.

Regulations as to licences to be granted under this section were made by Order in Council on April and last. Regulation 2 should be read in conjunction with Sub-section 2 of Section 2 of the Act, which provided that, before granting any licence, the local authority shall take into consideration whether, in the neighbourhood where the applicant for licence carries on or intends to carry on business, the reasonable requirements of the public with respect to the purchase of such poisonous substances are satisfied. Obviously, therefore, the regulation is not a mandate that licences shall be granted to nurserymen, florists, and seedsmen, but a recommendation that, should it be found necessary to grant licences to unqualified persons at all, preference should be given to such traders.

Regulation 5 practically reiterates Sub-section 2 of Section 2 of the Act, but gives the status of objectors to the police and existing vendors—that is, chemists and druggists—alone.

Objections by existing vendors are naturally looked on with suspicion, as being like those of Demetrius and his fellow-craftsmen at Ephesus, whilst the police in most cases appear content if they know nothing against the would-be licensees.

Regulation 13 is consoling to those who do not wish to have their bacon, as once was their beer, arsenically flavoured.

I have come now, at last, to the *raison d'être* of what is, I fear, a somewhat arid essay.

How is Section 2 of the Act being interpreted by local authorities?

Up to the end of May some 600 applications had been received for licences, of which more than half were from nurserymen and seedsmen, and by far the greater proportion were evidently required for horticultural purposes, rather than for agricultural.

These have been dealt with in a manner varying with the taste and fancy of the respective Councils, to whom applications have been addressed. In some



cases they have been referred to committees with power to act, and in others for report, the reports in many instances having been promptly ignored by the Councils.

A curious feature has been that a number of applications have been received in large towns, where one would think there was no doubt that the reasonable requirements of the public were already fully met. Thus, applications have been received in five towns having a population of half a million and over; in 14 towns with between 100,000 and 500,000; 15 towns with between 50,000 and 100,000; 27 towns with between 20,000 and 50,000; 23 towns with between 10,000 and 20,000; and between 50 and 60 towns with a population varying from 1,000 to 10,000.

In all, nearly a quarter of the applications have been granted, and many are yet pending.

The reasons for granting them have been varied and original.

Thus, on the occasion of the County Council of Carmarthenshire granting a licence, a member of the Council supported the application because he thought it would help to pay expenses, whilst the chairman, a medical practitioner, considered that the licences would help to break down a monopoly.

The Public Control Committee of the London County Council, in reporting regarding the poison licences, stated that, "so far as London is concerned, the wholesale dealers or pharmaceutical chemists, etc., will be able to supply the demand for poisons for use in agriculture, but the Committee thinks certain licences should be issued by the Council according to the requirements of the various neighbourhoods, since it is contended that, as florists and seedsmen developed the trade in poisonous substances for horticulture, they are therefore entitled to any profit arising from that trade. The Committee did not anticipate any danger to the public from the granting of licences, as it is the practice for seedsmen to require written orders for substances containing arsenic, which are then executed by the manufacturer, the seedsmen acting only as an agent."

This is a curious recognition of a vested interest created by illicit trading, but it was endorsed by a Committee appointed at Walsall which reported that all persons who have hitherto been in the habit of selling agricultural and horticultural poisons should be licensed for three months.

At Burton-on-Trent, a gleam of light would seem to have illuminated the local authority, as they entrusted the Medical Officer of Health with the duty of carrying out the provisions of the Act. However, when five chemists stated that they were prepared to supply all poisonous agricultural and horticultural preparations, and petitioned that no licences should be granted, the Committee answered that the regulations provided that preference should be given to nurserymen, possibly thinking that the chemists wanted licences.

Another authority actually offered a licence to a chemist who wrote petitioning against the granting of such to unqualified vendors.

The Invernessshire Council decided that licences be granted to all respectable general merchants who applied for them, and in a large number of cases licences have been given in populous towns where chemists abound.

Doubtless there are various local conditions which are known only to those resident in the respective districts, so that a measure of local option may be desirable and wise. Moreover, the actual number of chemists in a locality is not necessarily a criterion of the number who are able and willing to supply these special preparations.

In some cases the nature of the pharmacies does not permit their undertaking a heavy trade, and in others the difficulties of delivery would serve as a deterrent.

Again, when two licences were granted at Fort William, in Wigtownshire, no one could object, considering that the nearest chemist is ten miles away; but why should licences be granted in Manchester, where there are said to be 250 chemists, or in Sheffield, with over 100.

My object in calling attention to these matters is that those who have local influence in different parts of the country should exercise the same in seeing that

the intentions of the Act are carried out, or at least understood.

Medical officers of health and coroners should be specially interested in the subject, provided always that the emoluments of the latter do not depend upon the number of inquests which they conduct.

Clause 3 of the Act remedies certain anomalies in the conduct of the business of a chemist and druggist, and emphasises and enforces the personal qualification of the actual conductors of such business. Thus the first sub-section runs:—

"Any person who, being a duly registered pharmaceutical chemist, or chemist and druggist, carries on the business of pharmaceutical chemist, or chemist and druggist, shall, unless in every premises where the business is carried on the business is *bonâ fide* conducted by himself or some other duly registered pharmaceutical chemist or chemist and druggist, as the case may be, and unless the name and certificate of qualification of the person by whom the business is so conducted in any premises is conspicuously exhibited in the premises, be guilty of an offence under Section 15 of the Pharmacy Act, 1868."

This prevents qualified chemists owning and conducting more than one shop, unless in each one where they are not *bonâ fide* in charge themselves they have a qualified manager.

Sub-section 2 reads:—

"The provisions of Section 16 of the Pharmacy Act, 1868, which enable the executor, administrator, or trustee of the estate of a deceased pharmaceutical chemist or chemist and druggist to continue his business so long as such business is *bonâ fide* conducted by a duly qualified assistant, shall be construed as enabling such executor, administrator, or trustee to carry on the business if and so long only as in every premises where the business is carried on, the business is *bonâ fide* conducted by a duly registered pharmaceutical chemist or chemist and druggist, as the case may be, and the name and certificate of qualification of the person by whom the business is so conducted in any premises is conspicuously exhibited in the premises."

This provides more effectually than was done by the 1868 Act for the *bonâ fide* conduct by a qualified person of the business of a deceased registered chemist.

It will be noticed that in both cases a certificate of qualification has to be exhibited.

Sub-section 3 runs as follows:—

"A registered chemist or druggist may, notwithstanding anything in Section 15 of the Pharmacy Act, 1868, take, use, or exhibit the name or title of pharmacist."

The reason for this provision is that the title "Chemist" which has always been somewhat inappropriate as a description of a dispenser of medicine, had been usurped by corporate bodies, and it was desirable to reserve a title strictly to individuals which should be of the nature of a personal title, akin to that of solicitor or dentist.

The word "pharmacist," which had been previously reserved for pharmaceutical chemists, was thought to be the most generally suitable.

Sub-section 4 runs:—

"A body corporate, and in Scotland a firm or partnership, may carry on the business of a pharmaceutical chemist, or chemist and druggist—

"(a) if the business of the body corporate, firm, or partnership, so far as it relates to the keeping, retailing and dispensing of poisons, is under the control and management of a superintendent who is a duly registered pharmaceutical chemist or chemist and druggist, whose name has been forwarded to the registrar appointed under the Pharmacy Act, 1852, to be entered by him in a register to be kept for that purpose, and who does not act at the same time in a similar capacity for any other body corporate, firm or partnership; and

"(b) if in every premises where such business as aforesaid is carried on, and is not personally conducted by the superintendent, such business is *bonâ fide* conducted under the direction of the superintendent by a manager or assistant who is a duly regis-

tered pharmaceutical chemist or chemist and druggist, and whose certificate of qualification is conspicuously exhibited in the shop or other place in which he so conducts the business.

"A body corporate, and in Scotland a firm or partnership, may use the description of chemist and druggist, or of chemist or of druggist, or of dispensing chemist or druggist, if the foregoing requirements as to the carrying on of the business are observed, and if the superintendent is a member of the board of directors or other governing body of the body corporate, or of the firm or partnership, as the case may be.

"Subject as aforesaid, Section 12 of the Pharmacy Act, 1852, and Sections 1 and 15 of the Pharmacy Act, 1858, shall apply to a body corporate, and in Scotland to a firm or partnership, in like manner as they apply to an individual."

The necessity for this sub-section arose from the fact that by the decision of the House of Lords in the case of "The Pharmaceutical Society v. the London and Provincial Supply Association, Limited" (Law Reports, 1880, Appeal Cases, 857), corporate bodies were held to be exempt from certain provisions of the Pharmacy Act, 1868, and were able to keep open shop for the sale of poisons without being subject to the regulations for the storage of the same, which are binding upon chemists and druggists.

They could, of course, only actually sell poisons by the hand of a qualified person, but, should they do otherwise, the only remedy was against the assistant selling, who was seldom a man of substance, and consequently against whom penalties could not often be enforced.

It is now provided that in every case a corporate body must have a qualified superintendent of that part of its business which relates to the keeping, retailing, and dispensing of poisons, and, further, if the body corporate wishes to use the description of chemist and druggist, or of chemist or druggist, or of dispensing chemist or druggist, such superintendent must be a member of the board of directors or other governing body of the body corporate.

Further, as in the case of an individual chemist, every branch which is carried on by the corporate body must be under the *bona fide* management of a registered person.

Section 4 confers additional powers with regard to education and examinations upon the Council of the Pharmaceutical Society.

Finally, I would call your attention to Section 5, which provides for some restriction on the sale of certain acids and salts, although it is not thought necessary that their sale should be confined to registered chemists.

It is provided that they shall be labelled with the word "Poisonous," and with the name and address of the seller.

I am conscious of the inadequacy of this rapid review of the Poisons and Pharmacy Act, but I feared overtaxing your forbearance, and I hope it may be sufficient to incite discussion, and that if any point is not clear, I may be given a further opportunity of elucidating it.

## CLINICAL RECORDS.

### PUERPERAL FEVER AND GONORRHOEA.

By A. STAYT DUTTON, L.R.C.P.LOND., M.R.C.S. ENG.

THE following case seems to be worthy of record, not on account of any special features connected with it, but in relation to its cause.

I was asked to visit the patient, a nullipara, æt. 26, by the midwife who attended at her confinement, on the third day following it. On examination I found a temperature of 103.5° F., pulse 120, and the usual feverish symptoms. There was no pain or tenderness over the uterus, and no evident local symptoms, with the exception that there was a considerable amount of a muco-purulent vaginal discharge of an inoffensive character. Between the third and the tenth day the temperature varied between 100° F. and 105° F., and

the pulse between 100 and 140. During this period there were no signs of parametritis or peritonitis, and only slight abdominal pain and tenderness, which were not constant. There were no rigors. For three or four days she was troubled with diarrhœa. On two occasions the temperature rose to 105° F., but on the eleventh day the more severe symptoms had subsided and the temperature was normal.

With regard to the causation, the possible retention of a portion of the placenta or of the membranes was considered, but of this there was no account, nor were either found on digital examination of the uterus. An inspection of the external parts did not reveal a rupture of the perinæum, or any lesion that was likely to have been a centre of infection. With respect to the possible introduction of infection from without, there was no evidence of any neglect, inefficient management, or uncleanness on the part of the midwife, who had used the necessary antiseptics both for herself and for application to the patient all through her attendance. She had not attended any other recent case of puerperal fever. Inquiry was made with regard to the sanitation and hygiene of the house and of the neighbourhood. The house was one of fifty of a moderate size that stood in a row in a high and open country district, and detached by half a mile from the rest of the village. The system of drainage for these dwellings had for some time been considered ineffective. So much was such the case that the occurrence of this illness precipitated the renewal of it, and within a few days of her recovery the work of a fresh system was taken in hand. But although this was so, no connection could be established between the puerperal condition and defects in the sanitary arrangements. An epidemic of scarlet fever had for some time been present in the district, chiefly among children, but the patient had not, as far as she was aware, been brought into contact with anyone affected with it or in whom it subsequently developed. Attention was then directed to other possible sources of infection, and, on investigation, there was a distinct history that a discharge characteristic of gonorrhœa had been present for some months.

Having excluded the more usual determining factors in its onset, this complaint seemed to suggest the probable cause, and on going into the question more fully, I became persuaded that it was. The capability of acquiring puerperal fever through the agency of gonorrhœa is fully recognised, but the general opinion appears to be that it is an event of comparatively infrequent occurrence.

Eden considers that the gonococcus is the only organism which auto-infection can, with anything like certainty, be ascribed to. (a) Galabin states that Whitridge Williams found the gonococcus present in 6.4 per cent. of 125 cases in which the lochia contained microbes, and when the temperature was 101° F., or above; also that Kronig ascertained its presence in 27 per cent. of 179 similar cases. (b) Hart and Barbour record a case of acute peritonitis which appeared to be undoubtedly due to gonorrhœa, the woman developing it on the second day after confinement, and dying in ten days. (c)

The observations which have been made with regard to the subject, as well as such a case that has now been described, seem to accentuate the following points: Firstly, although the connection between the two diseases is uncommon, yet the association of gonorrhœa with pregnancy and the puerperal period often occurs. Secondly, in view of the serious results which may accrue to the mother and to the infant, that an inquiry should be made whenever possible with regard to the presence of a vaginal discharge during pregnancy, or, if there has not been an opportunity, at the time of the confinement. Thirdly, having ascertained the existence of gonorrhœa either in pregnancy, during labour, or after the birth of the child, that the necessary measures for its alleviation should in all instances be established.

The need of diagnosing the affection during these periods may be readily admitted, and it is possible that many cases of puerperal pyrexia for which a definite

(a) "Manual of Midwifery." 1906. P. 381.

(b) "A Manual of Midwifery." 6th Ed. P. 817.

(c) "Manual of Gynecology." 3rd Ed. P. 157.

cause is not assigned are thus occasioned, but it is evident that before attributing an attack of puerperal fever to the gonococcus, every other possible origin of infection should be eliminated.

The treatment which is required in order to arrest gonorrhœa in pregnancy and to prevent the deleterious effects it may produce during labour, or during the puerperium, is found in various works. The chronic variety is the most frequent in pregnant women, and, with regard to it, I may add that I have found the use of an injection night and morning, composed of a pint of hot water, in which  $\frac{1}{4}$  a drachm of zinc sulphate and the same quantity of boric acid are dissolved, in addition to, in some instances, the administration of iron alone, or in combination with quinine, the most efficacious method of procuring its relief. There is also the question of ophthalmia neonatorum, and it may be concluded that, if gonorrhœa was discovered whenever present before the infant's birth, and suitable treatment undertaken, as well as immediate attention to the eyes on the completion of labour, this unfortunate and ocularly destructive disease would be largely prevented.

## OPERATING THEATRES.

### ROYAL FREE HOSPITAL.

**UMBILICAL HERNIA.**—MR. WILLMOTT EVANS operated on a boy, æt. 9, the subject of an umbilical hernia. The patient had suffered from birth from the hernia, and all ordinary methods, pads, and trusses were said to have been tried before the child came under observation. The hernia formed a projection measuring about 2 in. in height when fully distended, and when reduced an opening was felt in the abdominal wall about 1 in. in diameter. Operation had been postponed because the child had suffered from a troublesome cough, but when this had been relieved by treatment, the child was admitted for operation. When the boy had been anæsthetised with chloroform, and the surfaces had been thoroughly cleansed, special care being taken to make the umbilical pit clean by means of an ethereal solution of biniodide of mercury, two curved incisions were made for about 1 in. above the hernia to a corresponding distance below, so as to enclose a portion of skin 4 in. or so in width, which included the umbilicus. The flaps thus marked out were turned back, and the tissues were dissected until the neck of the hernia was laid bare. The contents were then returned into the abdomen and the sac opened. It was found that a small portion of omentum was adherent to the sac wall. This was ligatured in two pieces with silk, and divided. The sac wall was next carefully separated from the abdominal wall, ligatured, and returned into the abdomen, the excess of the sac wall being removed. It was then found that the ring at the neck of the hernia could not readily be closed on account of its rigidity. The abdominal wall was therefore incised in the middle line above and below, dividing the ring; it was then possible to make one side overlap the other. The two edges were now brought together by means of mattress sutures of silk, without any tension, and the skin wound was sutured with catgut and dressed.

Mr. Evans said that it was seldom indeed that umbilical hernia in children required operation. Although it was very common in the first year of life, it was extremely rare to meet with it during the second decade, but it increased in frequency again after the age of 40. There was no doubt, he considered, that the umbilical hernia of infants has a natural tendency to cure, and in most cases recovery occurs whether treatment has been adopted or not. He had little doubt that the use of a suitable pad had a definite effect on the cure of an umbilical hernia, but the pad was so carelessly applied by the parents of most outpatient children, and it was so frequently omitted entirely, that if the cure depended on the proper use of the pad, recovery would be much less common than it was. In the present case the time had gone by to expect a cure without operation. The formation of a hard ring through which the bowel protruded in itself prevented that approximation of the sides of the open-

ing which was essential to a permanent cure. He therefore considered the time had come when operation might be legitimately employed. It was not sufficient, he pointed out, in cases of umbilical hernia merely to remove the sac; the opening itself must be closed. It was unwise, he thought, to attempt to operate on these cases if the child is suffering from cough or from any other condition likely to increase intra-abdominal pressure. The time devoted to the cure of the cough, he considered, would be well spent. The essentials of the operation were: the closure of the umbilical ring, while strict asepsis was of paramount importance. When the ring is recent the sides come together easily, and that was probably what happens in a spontaneous cure; but when years have gone by the substance of the ring thickens into a hard mass, so that it is difficult to bring together the sides of the ring. In such a condition there are two alternatives, he said, before the surgeon. He may either excise the ring or he may divide it above and below, and continue the incision for half or three-quarters of an inch in each direction. By either of these methods it will be found possible to bring together the sides of the opening. Of the two methods, Mr. Evans considered the second to be the better. Attention, he remarked, must also be paid to the method by which the two sides are to be held together; for the best results overlapping was essential, and the mattress stitches were the most suitable; but, above all, it must be borne in mind that there should be no real tension on the stitches, for if there be they will surely cut out.

Nothing need be said about the after progress of the case beyond drawing attention to the fact that great care was taken by bandaging to prevent any straining on the wound beyond the tenth or fourteenth day. When the dressing was removed at the end of a fortnight the wound was soundly healed. Most of the catgut stitches came away with the dressing, but one or two needed division and removal.

## TRANSACTIONS OF SOCIETIES.

### OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.

MEETING HELD IN THE ROOMS OF THE MEDICAL SOCIETY OF LONDON ON FRIDAY, JULY 9TH, 1909.

Mr. PRIESTLEY SMITH in the Chair.

DR. F. W. EDRIDGE GREEN showed a

#### SPECTROSCOPE FOR TESTING COLOUR PERCEPTION.

It is constructed like an ordinary spectroscope, except that there is a telescope and collimator both fixed, and in the focus of the eye-piece there were two shutters. Those cover the whole of the spectrum, and by means of them the operator can isolate any portion of the spectrum, in order to show the size of the patch, which seems to be monochromatic to any person. He said that whereas it used to take him three days to examine a case by the old instrument, he could now examine one in half-an-hour, because attached to each shutter is a drum marked in wave lengths, graduated to the fourth degree, which was very fine. That enables the size of the patch to be determined without any calculation. The spectroscope could be used for seeing the exact termination of the spectrum, and how far the ends extended.

Mr. N. BISHOP HARMAN showed a chart illustrating some new cataract pedigrees. The cases illustrated the truth of Dr. Treacher Collins' contention that the cataract was a defect in the lens secretion which went to make the capsule. The patients had plaques on the back part, behind the nucleus, and including the posterior part of the lens. In one girl the cataract extended so as to include the nucleus, while in a further case it projected forward like a piece of coral through the lens, so that it seemed there was lens matter bulging through. At first, he thought it was that, and that it had been needed, and afterwards got hard and sclerosed.

Mr. ARNOLD LAWSON and Mr. MACKENZIE DAVIDSON read a paper entitled

A PRELIMINARY NOTE ON THE TREATMENT OF EYE DISEASES BY RADIUM.

Mr. LAWSON said the cases had been selected from the out-patient clinique of Moorfields Hospital, and were selected as instances of maladies which usually proved obstinate or only improved slowly under the ordinary forms of treatment, or else were of an active and virulent nature, and so required drastic measures. Only 17 cases had so far been tried, but in every case the result of exposure to radium had been very encouraging. Most of the cases were corneal ulcerations, four were non-ulcerative lesions, and one was episcleritis. After one application of five minutes to a hypopyon there was distinct benefit. For instance, a man, æt. 35, gave a history of injury to the right eye. There was deep ulceration, and a grey infiltrated area of 4 mm. diameter, with a large hypopyon; 20 milligrams of radium were applied for 5 minutes, and five days later the injection was subsiding, and the hypopyon had disappeared. Two days after a second application of three minutes the man was discharged from the hospital, the eye being not quite white, but, for all practical purposes, well. Other cases also did very well from the treatment. In all cases the only other measures were boracic lotion and atropine where required. Some punctate erosions were also similarly treated, and gave equally encouraging results, as also did cases of old-standing trachomatous pannus, except in one case, in which there was increased vascularity after the treatment. The dosage of radium was an important point, and the small dose of 5 milligrams seemed to act as quickly as did a much larger quantity. In one case the pain after the application endured three days, but in the others the longest time was 20 hours. Dr. Mackenzie Davidson explained that the paper was a tentative one. The radium was applied in sealed glass tubes, the glass cutting off the Alpha rays, so that the Beta and Gamma rays only passed through the lesion.

Mr. ERNEST CLARKE and Mr. HEWKLEY discussed the paper.

The CHAIRMAN then, in a graceful tribute, presented to Mr. Edward Nettleship the Nettleship medal for his work in ophthalmology, and Mr. NETTLESHIP replied, paying a high compliment to the many coadjutors who had helped him to complete the pedigree on which he had been working.

MEDICO-LEGAL SOCIETY OF LONDON.

MEETING HELD JUNE 22ND, 1909.

Dr. SCOTT in the Chair.

A PAPER ON

THE POISONS AND PHARMACY ACT

was read by Mr. H. WIPPELL GADD. (This will be found in full on p. 33 of present issue.)

In the discussion that followed,

Dr. STANLEY ATKINSON asked whether the real reason for granting licences under Section 2 of the Act was not that chemists, being used to selling small quantities, charged too much when supplying horticultural poisons? He thought it would be interesting to notice whether in the next report of the Registrar-General there was any increase in the number of suicides and accidental deaths due to poisonous preparations used in agriculture and horticulture.

Mr. R. A. ROBINSON called special attention to Section 5, and the powers given therein to the Privy Council to make regulations as to the sale of mineral acids and soluble salts of oxalic acid. He thought the Medico-Legal Society might usefully make recommendations as to what, in their opinion, such regulations should include. He related an experience of his own, where a virulent preparation of nicotine was exposed for sale by a greengrocer, who was absolutely ignorant of its dangerous nature, and yet applied for a licence to sell poisons.

Dr. HUBERT BISS thought the Act under discussion a most iniquitous statute. All proposed pharmaceutical legislation which had been brought forward

in the interest of the public health had been watered down to suit commercial interests. Company chemists did nothing for pharmacy, but simply sold what they could with least trouble. They were large advertisers, and were, therefore, given the support of the Press. He thought it shameful that the personal title of "chemist" had been given to corporate bodies, whilst the title "pharmacist," which was of no use, because no one understood it, was restricted to individuals.

The CHAIRMAN (Dr. Scott) said, in his opinion, it was a very serious matter to allow persons who were uneducated, or at least had received no professional or technical training, to sell poisonous substances.

Mr. GADD, in reply, thanked the meeting for its very kind reception of his paper. He would have answered Dr. Atkinson's remarks had not Dr. Biss so effectively replied to them.

## CORRESPONDENCE.

### FROM OUR SPECIAL CORRESPONDENTS ABROAD.

#### FRANCE.

Paris, July 11th, 1909.

#### ARTERIO-SCLEROSIS TREATMENT.

It is generally believed that arterio-sclerosis is a malady of old age. Such is not the case. It can be observed, according to Prof. Huchard, in his paper read at the Geneva Congress, between 30 and 60 years of age; and Lancereaux published several cases between 30 and 40; but it is from 40 to 50 years that this affection is the most frequently observed. Death supervenes, in one form or another, between the ages of 50 and 65, this latter representing in most cases the extreme limit.

Arterio-sclerosis may be regarded, consequently, as a disease of ripe age, but, in reality, it reveals premature decline. Vigour, energy, good health, food, do not always correspond to the number of years. To say rightly, a man is more the age of his arteries (Casalis) than of his birth register. Atheroma of the blood-vessels is the cause of profound disorder in all the economy. The blood-vessels of arthritic individuals, writes Fernet, age early, and all the organs suffer from defective irrigation.

Arterio-sclerosis is the great cause of angina pectoris and apoplexy, and renders particularly grave certain infectious maladies, as grippe and pneumonia. It is consequently of primary importance to recognise the first signs of the disease before the arteries have become thickened and have lost their elasticity, for afterwards all treatment would be useless.

The practitioner, says M. Lancereaux, will not forget that if he does not succeed in curing arterio-sclerosis he will have one day or another to treat the serious disorders which result from it: functional insufficiency of the kidney (uræmia), or that of the heart (asystole), and also frequently cerebral manifestations.

The first symptoms of this malady are revealed by oppression in walking, headache, palpitation, vague pains, cramps, stitch in the side, præcordial anguish.

The pulse is hard, the heart-sounds sharp, especially the second, and all these symptoms become aggravated as the malady progresses. The patient complains of somnolence in the day, at night sleep is agitated, while polyuria is present in most cases. Symptoms of hypertension (epistaxis, divers congestions, etc.) are frequently observed, and the superficial arteries, radial, temporal, are hard and sinous.

Sometimes arterio-sclerosis affects particularly the nervous system, as described by Jacquet, of Bâle. The disorders are manifested by a change in the character; the patient becomes irritable, is easily fatigued, incapable of concentrating his attention on any subject for a certain time. Memory fails, especially as regards names and numbers, and these troubles are complicated with headache and vertigo.

The headache generally occupies the frontal region; it is less an acute pain than a kind of painful pressure. The patients complain of their heads being fixed, as it were, in a vice, and this sensation may persist for long periods. Vertigo is generally spontaneous, or it appears during a sudden change of position, such as

getting out of bed, or physical or intellectual effort. The patients frequently complain of noises in the ears, while intolerance for even small doses of alcohol is characteristic.

Patients are quite conscious of their condition, suffer accordingly, and frequently express their fear of softening of the brain.

This condition is susceptible of improvement, but generally remains stationary for years, and death is finally caused by apoplexy, sclerosis of the coronary arteries, or some other intercurrent malady.

This particular form of arterio-sclerosis is frequently confounded with neurasthenia, and this confusion may cause erroneous treatment.

What should be the treatment prescribed for the patient? The classical iodide of potassium has fallen out of favour.

For Dr. Huchard the iodide treatment is not only useless, but hurtful, during the pre-sclerosis period, as well as in the third and fourth period, when renal and cardiac insufficiency have to be treated.

The use of iodide of potassium has been found to be sometimes attended with such accidents as oedema of the glottis or of the lungs, especially in renal and aortic disease. Dr. Huchard also protests against the treatment by serums, trinitrine, nitrite of amyl, electricity, etc., which all of them possess but a hypothetical influence on arterial hypertension, which in reality might be regarded as a secondary element of the malady.

The real cause of arterio-sclerosis is not very clear. Alcohol and tobacco were incriminated, but unjustly, according to Lancereaux. Arthritism as a predisposing cause is generally admitted, as well as those affections which tend to lower the nutrition. It is probable that the presence of an excess of uric acid in the blood is one of the chief factors in the disease, or, in the words of Prof. Huchard, "gout is to the arteries what rheumatism is to the heart."

The rational treatment, consequently, affirms Dr. Marc-Frenkel, of arterio-sclerosis, consists in disintoxicating the patients by the use of dissolvents of uric acid. Over 40 cases were treated successfully by Dr. Frenkel with urodonal, a recent drug, considered to be the most powerful dissolvent of the acid, at the dose of a teaspoonful in a little water, four times a day between meals, for ten days every month. Under this treatment the arterial tension was notably lowered, while the phenomena of congestion (epistaxis, præcordial oppression, neuralgic stitches in the side), disappeared, and the patients recovered their ordinary sleep and lost all diurnal somnolence.

Besides the medical treatment, certain foods should be proscribed: high meat or cheese, fish, strong wines, kidney beans, sweet-bread, etc. Another advantage of this treatment by urodonal is that it is inoffensive even in renal insufficiency.

#### ARTHRITIC NODES OF THE FINGERS.

Iodide of sodium	} 1 dr.
Nitrate of soda	
Salicylate of soda	
Acetate of potash	
Water, 8 oz.	

A dessertspoonful at each meal (3) in a little water. The treatment should be continued six months, with an interval of rest of a week after the end of each bottle.

#### WRINKLES.

Milk of almonds, 2 oz.  
Sulphate of aluminium, 1 dr.  
Rose water, 6 oz.

To be applied at bed time. A good massage of the wrinkled surface should precede the lotion.

#### GERMANY.

Berlin, Ju'y 11th, 1909.

At the Verein für Innere Medizin, Hr. Bleichroeder related particulars of a case of

#### ENORMOUS CYSTS OF THE KIDNEYS.

The patient, a woman, was admitted into hospital suffering from severe bronchitis, and died soon after admission from cardiac failure. At the autopsy enormous cysts of the kidneys were found. The curious feature was that there had been no evidences of renal

mischiefs during life, or any disturbances of the circulation; there had been no uræmia. In answer to a question by Hr. Kraus, the speaker said that tumours had been felt in the abdomen during life, but no diagnosis had been made as to their nature.

Hr. Payr, Greifswald, gave an address on

#### THE PATHOGENESIS AND TREATMENT OF ULCER OF THE STOMACH.

Amongst the numerous attempts to explain the causation of the disease, he said that which found the most favour was that of self-digestion set up by some kind of circulatory disturbance (Virchow-Pavy). According to his own earlier experiments, blocking of a considerable area of the stomach by injection of China ink, or emulsion of dermatol into the vessels, invariably gave rise to hæmorrhage into the mesentery, with erosion and ulceration of the walls of the stomach.

These, rather quickly healing ulcers, would be more correctly described as corrosion defects, just as attempts to set up changes in the human subject, similar to the changes of *ulcus rotundum*, had only succeeded in producing traumatic defects. It was only very exceptionally that ulcers formed showing no tendency to heal (Fütterer).

The speaker had now succeeded in producing all possible forms of ulcer of the stomach by injecting weak formaline solutions, diluted alcohol, into the vessels of the stomach walls, with or without simultaneous lesions of the mucous membrane, those with hard callous edges, as well as those that perforated into the abdominal cavity. In his opinion the chief cause of want of any proclivity to heal lay in extensive changes in the walls of the blood-vessels of the stomach, in sclerosis and puckering around the base of the ulcer.

From this observation he had drawn conclusions as regarded treatment. After a short description of the complications met with in ulcer of the stomach, he passed on to treatment.

Simple ulcer belonged to internal treatment. Not only did the so-called "classic" complications of ulcer demand surgical interference—hæmorrhage, perforation, and stenosis—but also callous ulcers, tumour ulcers, as they defied treatment, or returned after improvement.

Independent of operative treatment of perforative ulcer, and for excessive hæmorrhages, there was at present a rivalry between gastro-enterostomy and resection of the ulcer.

The first-named was at present the normal method for the majority of surgeons. The latter was deserving of being more used in ulcers of the body of the stomach. Like Riedel, he was also in favour of circular (transverse) resection. He had treated 21 cases of ulcer of the stomach by excision or resection, and had only 1 death to record.

At the close of his address he showed two patients on whom he had operated by resection for ulcer of the stomach with tumour (*Ulcustumoren*), removing extensive sections of stomach wall. Both were now in perfect health.

Hr. Rosenheim agreed with the giver of the address as to the pathogenesis. As regarded the question as to the frequency of cancer formation, enormous figures had been given, but wrongly. Some years ago he had given 6 to 7 per cent.; Virchow had opposed him, and given the percentage as 2 to 3. But Virchow had only seen the termination of the process, and at that stage the traces of the genesis had often disappeared. He now thought 6 to 7 per cent. too low; he would place it at 10. He quite agreed with Payr as to treatment. His mortality with resections had been 5 per cent.

Hr. Kraus gave statistics taken from a prize essay that had been submitted to him. According to this, out of 600 persons that had undergone gastro-enterostomy, only 1.10 per cent. had died from carcinoma. From this it would appear that the dread of cancer should not lead to the selection of gastro-enterostomy as opposed to resection. It was interesting that Brenner found carcinoma in the cicatrix after resection, and, curiously, also in the percentage of 1.10.



Hr. Bickel had seen duodenal ulcers after gastro-enterostomy. The disappearance of the disease with advancing pregnancy was probably due to gastric secretion becoming diminished at this stage.

Hr. Katzenstein laid stress on the great importance of Payr's experiments, but said they did not explain why ulcer of the stomach had so little tendency to heal. After operation (he preferred gastro-enterostomy to resection), the diet he recommended was a necessity.

### AUSTRIA.

Vienna, July 11th, 1909.

#### HISTORY OF SYPHILIS.

At the Gesellschaft der Aerzte, Kronfeld startled the members with a history of syphilis which, he affirms, commenced *seven or eight hundred years* before the birth of Christ. We were always told at school that Columbus was the licentiate that inflicted this disease on mankind. We now learn that that daring explorer has been maligned, and that a young woman of the negro type has all the marks of the evil one. It seems that Kronfeld combines painting with medicine, and in his pursuit as a painter has devoted a considerable time to morbid diseases among the ancients. In his devotion to medicine he has discovered an ancient piece of sculpture in the Austrian Museum for Art and Industry that conclusively proves that syphilis was common among the Greeks seven or eight hundred years before the birth of Christ.

The subject of investigation is on a vase still in good preservation. On this vase are two figures, having the titles inscribed, "*Ungerechtigkeit*" and "*Rechtigkeit*," the former having a distinct negro type, while the latter was spotless and without a blemish, the former has large chronic serpiginous ulcers on both legs and arms, that no practised eye can doubt the nature of the disease. The ulcers on the body may be confused with lepra, but their serpiginous form, raised, sharp-cut edges, are strongly presumptive of syphilis. The "*Rechtigkeit*" is supposed to have been put to death for her chastity, and is represented in the figure as purity itself. Kronfeld cannot believe that this disease had an epoch of explosion, nor that this is an isolated case in the art.

In Darmstadt there is another old bronze figure with the same disease depicted on the arms and hands; sharp, depressed ulcers, circular and serpiginous, and resembling the "*Ungerechtigkeit*" in every detail. The absence of these chronic diseases in Grecian art in general is no proof that syphilis did not exist, as the Grecian was always in favour of depicting perfection, and not blemishes.

It was suggested, he said, that these ulcers on the "*Ungerechtigkeit*" were the result of tattooing, but it must be borne in mind that tattooing was rare amongst the ancients, but even tattooing can be distinguished from these chronic serpiginous ulcers. He next quoted from ancient medicine, historians and poets to prove that Columbus was innocent of the crime attributed to him.

Hovorka said the origin of syphilis always seemed to him to be one of self-righteousness—everyone blamed his neighbour! The French used to call it "*Mal Espagnol*," "*Mal Anglais*," "*Mal Indien*," "*Mal Portugais*," while the Spaniards called it "*El mal Francez*"; the Portuguese, "*El mal Castellano*"; in Italy it was called "*Mal di Spagna*"; in Germany, "*Spanische*," "*Litannische*," "*Lothesingische*," and "*Franzosen Krankheit*"; in England it was long known as "*The Spanish Sickness*," and even the Turks called it the "*Christian Disease*"—everyone but themselves were to blame for creating this vile offence among the pure and righteous!

It seems to be a universal disease, and one whose medical treatment has passed through many phases, which may briefly be divided into mineral and vegetable. Popular domestic medicines appear to have been used before the recognised physician commenced with mercury, copper, etc. Mercury was first extensively used in the West Indies; Turkey and China using cinnabar; Russia and Bosnia in the form of vapour, and dusting the sores. Calomel with a vegetable infusion appears to have been early used by the Chinese; thereafter Turkey and Russia used it as

an external application. Sublimate was used in Siberia long before syphilis was reported in Europe, and copper filings in South Africa, all claiming a specific for the mysterious disease. Vegetable decoctions, as sarsaparilla, guaiacum wood, China root, smilax, etc., were among the favourite drugs to combat the disease. From the history of the apothecary we learn that syphilis was an early plague of mankind that probably flowed and ebbed according to leisure and luxury.

Ehrmann brought forward documentary evidence to prove the American origin of the disease. It appears to have presented itself quite suddenly, as Cataneus writes of it:—"*Morbus insolitus, nullis antea saeculis visus*," which he goes on to say is very destructive and epidemic. Dürer, of Venice, tells us that an attack ensures immunity, and inoculation modifies the attack, although mercury seems to have been freely administered. It may be noted here that mercury was used early by the Moors in Spain for scabies, which would lead to the use of the drug in the new disease, and as warfare was common in those times, the Italian and Venetian surgeons would early follow their example.

## FROM OUR SPECIAL CORRESPONDENTS AT HOME.

### SCOTLAND.

MEMORIAL TO THE LATE DR. FINLAYSON, GLASGOW.—On behalf of the committee of subscribers to the fund in memory of the late Dr. James Finlayson, Sir Hector Cameron has presented to the Council of the Faculty of Physicians and Surgeons of Glasgow a deed of gift conveying to the Council the future management of the funds. The income of the fund is to be applied to the endowment of a "Finlayson Memorial Lecture-ship," the lecturers to deal with some branch of pathology, medicine, or the history of medicine.

TREATMENT OF PHTHISIS IN EDINBURGH.—The results of the system of isolating cases of advanced phthisis, which would otherwise form dangerous foci of infection, having proved satisfactory, the Town Council has resolved to extend the accommodation provided in the Edinburgh Fever Hospital from 50 to 62 beds. It is proposed to erect six pavilions of 12 beds each, and the estimated annual additional cost of maintenance is put at £250.

GLASGOW ROYAL INFIRMARY.—The Lord Provost of Glasgow opened the new surgical block of the Infirmary on June 23rd, and in congratulating the managers on the progress made in their scheme of reconstruction, stated that the next portions to be proceeded with were the third wing of the surgical wards, the isolation department, the pathological department, and the block for special diseases. The probable cost of the alterations is estimated at about half a million, towards which £320,000 has been raised.

PRESENTATION TO PROFESSOR CLELAND, GLASGOW.—On the occasion of his retirement from the Chair of Anatomy, Professor Cleland was presented by the medical students of the University with a handsome carriage clock. The proceedings took place on June 25th in the University Union, and the presentation was made on behalf of the students by Mr. Galbraith, President of the S.R.C.

FIRE AT PEEBLESHIRE FEVER HOSPITAL.—The central building of this hospital was completely destroyed by fire on the night of July 8th. There were 20 patients in the hospital at the time, and these were all safely removed and accommodated in the Poor-house on the opposite side of the road. The fire was extinguished in about two and a-half hours, the wings of the hospital, in which the wards are situated, being saved, but the central administrative block, which is built of wood and corrugated iron, was completely burned to the ground.

### BELFAST.

ULSTER MEDICAL SOCIETY.—The annual meeting of this Society was held in the Medical Institute, Belfast, on Thursday evening, July 8th, the President, Mr. T. S. Kirk, in the chair. The minutes of the last

annual meeting having been read and confirmed, the report of Council was presented, with the Hon. Secretary's, Treasurer's, and Librarian's reports. These showed the Society to be in a flourishing state, the Treasurer having a balance of £73 in hand, notwithstanding some exceptional expenditure.

These reports having been adopted, Dr. Calwell moved that the Hon. Secretary be instructed to consult with the Hon. Secretaries of the Belfast Division and Ulster Branch, British Medical Association, and arrange at the commencement of each year the dates of ordinary meetings for the year, and see that these dates are notified to Fellows and Members. This resolution was passed.

The following were elected office-bearers for 1909-10: President, Dr. Austin; Vice-Presidents, Dr. Darnell (Bangor) and Dr. Maguire; Hon. Secretary, Dr. Howard Stevenson; Hon. Treasurer, Dr. Fieldin; Hon. Librarian, Dr. Storey. A committee was appointed to draw up the deed of gift of the Belfast Cup, which the golfing members of the Society are presenting to the British Medical Association, to be played for at the forthcoming meeting of the Association in Belfast.

Through Dr. John McCaw, a very beautiful copy of an address was presented to the Society, the original having been presented to Dr. Coffey in 1839 by the members of his class in surgery, on the occasion of his retirement from his chair in the old Belfast College. It was through Dr. Coffey's influence that his favourite pupil, Dr. Alexander Gordon, was appointed his successor.

## LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

### THE REMOVAL OF GROWTHS FROM THE VOCAL CORDS.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—Dr. Dundas Grant, in his letter of July 7th, points out that in the report of my remarks in connection with the removal of a laryngeal growth by direct vision laryngoscopy, justice was scarcely done to the older indirect mirror method of removal with angular forceps. I, of course, agree with him that it has often been possible for experts to remove favourably situated laryngeal neoplasms at one sitting by the indirect method, not only with, but even without, cocaine anaesthesia, as in the early operations of Czermak and Mackenzie.

My remarks, however, were made in reference to a growth unfavourably placed—viz., springing from the anterior fourth of the left vocal; the exact point of origin was not sufficiently brought out in the report. Dr. Grant will probably endorse my observation "that the removal of growths in the near neighbourhood of the anterior commissure was always difficult under the old indirect mirror and forceps method, and often necessitated a large number of sittings to train the patient to toleration."

Your reporter has given an excellent summary of my remarks to him. If, however, I had had an opportunity of revising his notes in manuscript or in "proof," it is not unlikely that I should have more definitely acknowledged the remarkable results sometimes achieved in the past by experts, in spite of the difficulties incidental to the indirect method. After considerable experience with both methods, I am, however, convinced that the direct one enables us to remove even a favourably situated growth more easily, certainly, and thoroughly than the old method with the mirror and angular forceps; and as for cases which present difficulties, whether due to site or size of the growth, or to the sensitiveness or to the age of the patient or what not, the superiority of the new method cannot be seriously questioned; and it moreover possesses the enormous advantage of being easily carried out (by an expert) under deep chloroform anaesthesia, if necessary. For my own part, having mastered the technique of direct vision endo-laryngeal handicraftsmanship, it is quite a relief to me to feel that I shall

rarely be annoyed again by failure to remove a laryngeal growth at one sitting, or at the most two sittings, in the case of difficult multiple neoplasms.

In spite of Dr. Grant's loyalty to the older method, in which he is so expert, I feel very confident that his increasing experience in dealing with large, tough, tubercular growths through the direct laryngeal spatula will before very long lead him to adopt the latter method almost exclusively in other endo-laryngeal surgical procedures.

I am, Sir, yours truly,

WILLIAM HILL.

26 Weymouth Street, London, W.,

July 11th, 1909.

### EMOLUMENTS OF CHRISTIAN SCIENCE.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—“Science and Health” is published at a price which is not in the least extravagant, and I have never known a single person who has not been able to obtain it without difficulty. Dr. Sers suggests that the price of the book is kept up for mercenary purposes. Only last week a correspondent wrote objecting that he could not obtain a copy of “Science and Health” in a foreign language, and asking why its circulation was prohibited by a refusal to have it translated into foreign languages. If the aim of the publishers of “Science and Health” is to make money out of it, imagine the enormous amount of revenue they are cutting off by refusing to have it translated into other languages; and, in precisely the same way, if their object is to make money, how could they make money better than by flooding the world with cheap editions? Furthermore, there is attached to every Christian Science church a free circulating library, from which every prospective purchaser of “Science and Health” can borrow it for nothing. I am not aware that the publishers of Farrar's “Life of Christ,” or Renan's “Life of Jesus,” to take the two examples selected by Dr. Sers himself, ever opened their doors to the public and said, “You can come and borrow these books for nothing, and read them, and afterwards buy them or not, as you may desire.” The reasons for publishing “Science and Health” at its present price, which is a perfectly modest one, are the business of the Christian Science Church alone. It should be perfectly possible to differ absolutely from your neighbour, without it being necessary to impute either ignorance, fraud, or greed.

I am, Sir, yours truly,

FREDERICK DIXON.

July 3rd, 1909.

[At Mr. Dixon's urgent request we print the essential parts of his very long letter. Those who have studied Mr. Dixon will not be surprised to find that he does not yet recognise that his writings serve merely to bring ridicule upon the cause he champions; at least, when he addresses scientific readers. Christian Science professes to cure all diseases by prayer, and by practice of the cult by agents who, mostly, make an income out of it. If its claims could be in any way substantiated crowds of unpaid missionaries would be forthcoming to carry its benefits to suffering humanity throughout the world. Mr. Dixon, however, tells us that, lest they should be charged with mercenary motives, Christian Scientists refuse to issue their works in foreign languages, thus depriving foreigners of the blessings so near their reach. The whole thing is too childish for argument; and neither now nor in future can we give more space to it.—ED. M. P. AND C.]

## OBITUARY.

ANDREW JAMES DUNCAN, M.D. Ed.

WE regret to record that Dr. Andrew James Duncan, of Dundee, died at his residence on July 7th. A stroke of paralysis had laid him low, and, in spite of every effort to promote recovery, the attack proved fatal. By his death there is removed one of the foremost medical practitioners of the city. He had a large

*clientelle*, representative of all classes of the citizens, and was recognised as a skilful and careful physician. He was born in India, his father being Dr. Andrew Duncan, of the Honourable East India Company's service. He was brought up in Dundee, and was educated in the city and at Edinburgh University. After graduating M.D. at Edinburgh in 1865, he studied at Vienna and Paris, and commenced the practice of his profession in Dundee in 1866. Since then his life has been spent in the city. He soon gained the confidence of the public, and his practice extended rapidly. All his energies and time were devoted to his work. He was, however, deeply interested in the Infirmary, of which he was a director for some time, and up to his death he was an honorary consulting physician of the institution, as well as being at one time honorary ophthalmic surgeon. Amongst other appointments held by him were those of surgeon of the Eye Institution and surgeon of the Institution for the Blind.

## SPECIAL ARTICLES.

### SIXTEENTH INTERNATIONAL CONGRESS OF MEDICINE, BUDA-PESTH, AUG. 29th—SEPT 4th.

THE travelling arrangements to and from the Budapest Congress have now been issued, and the *carte d'identité* enabling members to obtain certain reductions in the fare has been sent to everyone who has paid his subscription. The official reductions are 50 per cent. on the French lines if application is made at least three days before the ticket is required upon the pink form issued. This form must be stamped at the Congress before it is available for the return journey. The Royal Hungarian State Railways make a reduction of 50 per cent. to members furnished with the green card of identity, and there is a similar reduction on the Danube boats. But it appears from the instructions issued that very few members of the British section will be able to obtain these reductions without breaking the journey at each frontier, as it has been found impossible to establish any system of through tickets at reduced rates.

The Great Eastern Railway Company will issue circular tickets as follows:—London, Harwich, Hook of Holland, Rotterdam, Cologne, Mayence, Frankfort-on-Maine, Passau, Linz, Vienna, Budapest; Vienna, Dresden, Hanover, Salzbergen, Hook of Holland, Harwich and London. The cost of these tickets is £10 14s. 5d. issued singly, or £8 2s. 11d. if issued to parties of twenty and to Vienna only. They are available for 90 days, second-class rail in England, first-class on the G.E.R. steamers, second-class rail on the Continent, and first-class on the Rhine steamers, or second-class rail between Cologne and Mayence. By the night service, leaving Liverpool Street at 8.30 p.m., there is a through carriage with a restaurant car from the Hook of Holland to Frankfort (5.48 a.m. to 4.10 p.m.), and a sleeping car (extra fare) from Frankfort to Vienna (4.37 p.m. to 7.30 a.m.). If the journey is taken *via* Dresden, there is a through carriage with a restaurant car from the Hook of Holland to Hanover (5.25 a.m. to 3.5 p.m.); a through carriage with a restaurant car from Hanover to Leipsic (3.5 p.m. to 10.2 p.m.), and a sleeping car (extra fare) from Dresden to Vienna (10.2 p.m. to 7.40 a.m.).

Mr. J. Y. W. Macalister issues a circular from the Royal Society of Medicine, 20 Hanover Square, W., stating that he has organised a party for the Fellows of the Royal Society of Medicine and for the friends of Fellows, although they are not connected with the Society, who are properly vouched for. This party will be accompanied by an experienced courier. It will travel by the *train-de-luxe* both on the outward and homeward journeys, and will be lodged in the best hotels. The inclusive charge is 36 guineas *via* Ostend, and 38 guineas *via* Calais. A deposit of £5 is required, and names are to be sent in at once.

The South-Eastern and Chatham Railway Company quote specially reduced rates for parties of not less than 20 passengers travelling together on the outward journey, but will make no reduction to members travel-

ling individually. The Zeeland Steamship Company, which runs through carriages from Flushing to Vienna in connection with the day and night services from Victoria to Queenboro', will also allow a reduction on the ordinary fares for parties of twenty who travel together.

## REVIEWS OF BOOKS.

### OXYGEN AND SPARTEINE IN ATHLETICS AND TRAINING. (a)

THIS claims to be a contribution to the physiology of Doping. So little is said concerning the use of sparteine that it is difficult to see what are the grounds for its inclusion on the title page. After a brief discussion as to whether the use of oxygen and sparteine can be defended on ethical grounds the author reproduces an article in which his inquiries and experiments upon the administration of oxygen to some few cyclists in France are set forth. The matter is very simply explained, in fact just those difficulties which meet one in facing the subject are omitted, and the author's deductions are equally simple. With all respect it cannot be said that any great addition is made to what already is known on the subject.

### DISEASES OF THE EAR. (b)

A REVISED English edition of the late Professor Politzer's classical work constitutes an event of no little importance in the domain of British otology, for by common consent the author throughout his life held the leading place in the speciality which he may almost be said to have created. No aural surgeon can afford to neglect the views and opinions of the master, and the real question is, whether practitioners in any other line of medicine can dispense with a book which marks the acme of the science of otology. That is for them to decide, but we may say in passing that they will find nowhere in present-day aural literature a treatise so complete, so adequate, and so satisfactory. The anatomy and physiology of the sound-conducting apparatus—the external and middle ears, the Eustachian tube and mastoid process—occupy sixty-five pages, and all the minutiae are entered into fully; whilst the anatomy and physiology of the sound-perceiving apparatus bring the number of these preliminary pages to nearly a hundred. Nearly another hundred are devoted to the methods of physically examining the organ of hearing, and the elaborate care with which each method is described and explained will leave little to the imagination of a practitioner who wishes to render himself *au fait* with the *technique* of modern processes. At the close of this part of the subject the author makes some interesting remarks about the hygiene of the ear. He is convinced that acute suppurative middle-ear affections are much more common in town than in country dwellers, and he thinks that physicians should teach industrial workers, especially those exposed to dust, to wash out the nose with saline solution two or three times a week. Coming to diseases of the ear which, with related maladies of the nose and throat, occupy the remaining six hundred pages, we find a great deal of valuable and sometimes out-of-the-way information which Professor Politzer accumulated during the course of his vast experience. In some respects he is inclined to take a more gloomy view of slight derangements than is customary in this country, his estimate, for instance, that ceruminous plugs in the external auditory meatus, are so frequently associated with organic changes in the middle-ear and labyrinth, seems to lay too much stress on what is commonly a purely local affection. Needless to say, much space is devoted to chronic middle-ear disease and its complications, and here the author is certainly more

(a) "Oxygen and Sparteine in Athletics and Training." By Oscar Jennings, M.D., Paris. London: Bailliere, Tindall and Cox. Price 1s. net.

(b) "Diseases of the Ear." By Professor Adam Politzer, of Vienna. Translated and Edited by Milton J. Ballin, Ph.B., M.D., Assistant Surgeon to the New York Ophthalmic and Aural Institute and to the Mount Sinai Dispensary, Ear, Nose, and Throat Department, and by Clarence L. Heller, M.D. Fifth Edition. Revised and enlarged. London: Bailliere, Tindall and Cox, 1909. Pp. xvi. + 897. 337 illustrations. 25s. net.

conservative in his recommendations than most aural surgeons. A particularly pleasing feature of this book is the credit given to native and foreign otologists who have done good work and advanced the science they are interested in. Professor Politzer always attempting to give credit where credit is due. Excluding all treatises and papers mentioned in the body of the work, his bibliography, which extends to twenty pages and includes papers written between 1733 and 1908, shows the catholicity of his reading and study. Indeed, it is difficult to say more than is justified of this encyclopædic work.

#### SPRAINS AND ALLIED INJURIES. (a)

MR. WHITELOCKE'S book on "Sprains" is the product of a long and rather special experience in the minor injuries which accompany the pursuit of athletics, but it is none the less applicable to similar conditions occurring every day in the course of ordinary life. It is a very practical clinical work. Mr. Whitelocke has, happily, not been content to deal with his cases in the way he learnt in his student days, but has brought to bear on the problems set him in practice an original and inquiring mind. He has treated his patients' injuries as definite surgical entities which have resulted from anatomical derangements, and has thought out how these derangements may be restored. In consequence he has evolved methods of practice new, interesting, and effective, and he deserves immense credit for his ingenuity and skill. No detail is too trivial for notice, and no method of treatment too simple, if it accomplishes the end. As examples of the latter proposition we may cite his plans for dealing with an ordinary sprain of a joint and for replacing a slipped cartilage in the knee. Cold and heat, the traditional variants, in the treatment of sprains, he eschews, in favour of elastic pressure, obtained by wrapping the joint thickly in cotton-wool and bandaging firmly over it. Those who have practised this treatment will find it not only much more efficacious as regards cure, but much more comforting to the patient. As regards slipped cartilages, Mr. Whitelocke observed that the motion of the knee in swimming was the same as that required for reduction of the internal cartilage, and, before trying any further treatment, he makes his patients lie on the floor of his consulting-room and swim vigorously on the carpet. If success does not follow, then he is prepared with a method of reduction by movements which he describes fully and illustrates by photographs. We think the author has done himself a little injustice in not widening the title of his work, for he gives a good deal of information about his methods of operating on joints, and other subjects, such as rupture of muscles, which is of much value, and which the ordinary reader would not, in the ordinary course, come to a work with this title to look for. We greatly dislike the word "system" in connection with surgery, but Mr. Whitelocke's methods of treatment are so original as almost to constitute a new "system" of treatment in the injuries of which his book deals, and we hasten to add that they are much more efficacious than those publicly advocated by any other surgeon, with the exception of Sir William Bennett. Practitioners who do not like to see their patients drift off to bone-setters and electrical quacks, through disgust at the inefficacy of surgery to deal with their sprains, and by such drifting run the risk of life-long injury, will hasten to make themselves acquainted with the contents of this admirable book.

#### DISORDERS AND DISEASES OF CHILDHOOD. (b)

DR. STILL'S new work is a noteworthy contribution to the literature of diseases of children. Its outstanding merits are two: it is based on the large personal experience of the author, and the subject is dealt with from the clinical standpoint. In his preface Dr. Still disclaims any idea of competing with the systematic text-books, but, as a matter of fact, he has

left out little that is of importance, though, curiously enough (and the omission is to be regretted), he does not seem anywhere to describe that form of arthritis with which his own name is now generally associated. In a short review it is impossible to refer at length to the interesting observations with which the book bristles, but we may draw special attention to the chapters on certain clinical groups of symptoms and morbid conditions which are interpolated among the more formal descriptions of stock subjects. Instances of these are the chapters on abdominal pain in children past the age of infancy; on the medical aspects of dental caries; on "bilious attacks," so-called; on fever of obscure causation, and the like. These chapters will be found both practical and extremely interesting, discussing, as they do, subjects which are often a matter of perplexity to the practitioner, and on which most text-books give rather scanty information. They display Dr. Still's powers of observation, and his critical acumen, and his originality, to an extent which is impossible when he is dealing with more hackneyed subjects. In regard to dentition, Dr. Still points out that it occasionally oversteps physiological limits, and may be a cause of fever, of indigestion, or other symptoms—a view in which we heartily concur. We notice that in several places he lays stress on the necessity for boiling milk on account of the risk of tuberculous infection. In this respect his opinion has—as he admits—undergone a change, and we are glad to see that he no longer advocates the use of raw milk. One of the many small points of interest brought out is the fact that in some marasmic babies the use of sodium citrate is apt to cause oedema. The chapter on threadworms is also full of novel ideas; the cases cited in support of the notion that appendicular pain may be caused by the lodgment of oxyurides in the appendix are very suggestive. It would require a long review to do full justice to this most interesting volume, and we must content ourselves by urging practitioners to study its pages for themselves, in the full assurance that they will not regret doing so. Alike by its originality, its practical character, and its perspicacity, it is a most thoroughly satisfactory book. Dr. Still has obviously put an enormous amount of work into its production, and he may be most heartily congratulated on the result.

#### HOUSE DRAINAGE AND SEWAGE DISPOSAL. (a)

WE welcome under the above title and in book form the Cavendish Lectures delivered in February, 1909. While containing no strikingly original statement, the lectures are a mastery summary of the most recent and important knowledge in regard to the subject of which they treat. The style is clear and vigorous, and the author's meaning is never in doubt; in fact, by making the best use of the English language, Dr. Parkes has produced what should serve as a model for those who wish to enter the field of scientific literature.

In spite, however, of the excellence of the work, there are a few points to which exception must be taken; for instance, on page 41 the author justly deprecates any attempt to dogmatise as to the length of time that the typhoid bacillus can exist in a saprophytic condition, and yet on page 21 he refers in detail to experiments from which definite conclusions in this connection have been drawn, while Koch's views—which are presumably reliable and certainly not dogmatic—are not even mentioned.

Again, on pages 101, 102, 103 the advantages of land treatment are clearly stated, including Dr. Houston's finding that, after such treatment, some effluents might be regarded as potable water of more than average quality; and as a like result is utterly unobtainable by other processes commonly in vogue—the processes in question really obviating nuisance rather than danger—it might naturally be assumed that land treatment is the goal at which we should aim. In view of the above, it is rather surprising to find on page 107 that land treatment receives somewhat contemptuous reference. It is stated that "on the whole, the idea that the land is in all cases the best, because

(a) "Sprains and Allied Injuries of Joints." By E. H. Anglin Whitelocke, M.B.Ed., F.R.C.S., Ass.-Surgeon to the Radcliffe Infirmary, Oxford, Litchfield Lecturer in Surgery in the University of Oxford. Oxford Medical Manuals. 1909.

(b) "Common Disorders and Diseases of Childhood." By George Frederic Still, M.A., M.D.Cantab. 8vo. Pp. xii. and 731. London: Henry Frowde and Hodder and Stoughton. 1909.

(a) "House-Drainage, Sewerage, and Sewage Disposal in Relation to Health." By Louis C. Parkes, M.D., D.P.H. London: H. K. Lewis. 1909.

the most natural material for the treatment of town sewage has now been abandoned"—it may be observed with absolute truth that no person of average intelligence ever held any such views regarding the universal applicability of land, as the exercise of even a modicum of common sense tells us that land treatment cannot "in all cases" be the best; but this conclusion does not alter the fact that the waste of sewage entailed by our present systems, including expense of plant and upkeep, is represented by an annual loss of many thousands of pounds, while the actual causes of disease—viz., pathogenic germs—are to all intents and purposes unaffected. Dr. Houston's report for the Royal Commission on Sewage Disposal (Second Report, 1902) leaves no doubt as to the failure of septic tanks, contact beds, etc., to deal with germs of the nature just referred to, so that this particular point can be considered as definitely settled; and it may here be incidentally observed that it is a matter of deep regret that Dr. Houston's dictum cannot be forcibly thrust before public attention, particularly at a time when glaring social abuses appear to stand some reasonable chance of remedy. A far more extensive use of natural agencies would be adopted if it were not for the existence of what are known by courtesy as "vested interests," or, in plain English, as the obstructiveness of private landowners. We would in this matter have heartily welcomed the force which Dr. Parkes' authority would lend to the cause of what is unquestionably a neglected sanitary reform, and we therefore regret the opportunity he has lost for rendering service to that branch of medical science of which he is a justly distinguished ornament.

In spite of the existence of what we believe to be defects, we can honestly congratulate Dr. Parkes on a work which should be in the hands, not only of those who are officially connected with sanitation, but of all who are interested in the public health of the country.

#### THE INFLUENCE OF HEREDITY ON DISEASE. (a)

It was a most happy thought of the Council of the Royal Society of Medicine to have instituted a discussion of such breadth and value on this important subject, and it is an equally happy thought to have the discussion published in book form, so that it may be read by those to whom the "Transactions" of the Society are not accessible. The contributors to the discussion contain such distinguished names as Professors Karl Pearson, Bateson, and Sir John McFadyean, and Drs. Mott, Savage, Bullock and Bond. It is impossible here to enter into the individual merits of the numerous questions raised, for they rank among the most abstruse in all science. Heredity is a field where English Science, thanks to the labours of Galton, Pearson, Bateson, and a host of others, ranks at least as high as that of any foreign country, a statement that, unfortunately, cannot be made in many spheres. The present discussion well maintains this eminent level, and furnishes what may legitimately be termed an epoch-making contribution to a subject which is of cardinal importance to the human race as a whole, and to the medical profession in particular. The volume, which is excellently got up, is warmly recommended to all members of the medical profession.

### LITERARY NOTES.

MESSRS. BAILLIÈRE, TINDALL AND COX announce that from July 1st they have taken over the publication of all the books by Sir William Whitla, including "Materia Medica," "Practice of Medicine," and his well-known "Dictionary of Treatment," a new edition of which will be issued in the autumn. They will also in future publish Green's "Pathology and Morbid Anatomy," a tenth edition of which is now in

(a) "The Influence of Heredity on Disease, with Special Reference to Tuberculosis, Cancer, and Diseases of the Nervous System." A Discussion opened by Sir Wm. Church, Sir Wm. Gowers, Arthur Latham, and E. F. Bashford. London: Longmans, Green and Co. Price 4s. 6d. net.

circulation. These changes are the result of the retirement from business of Mr. William Renshaw, head of the old-established firm of Henry Renshaw, which will now cease to exist.

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MESSRS. BAILLIÈRE, TINDALL AND COX also announce the following new works and new editions in active preparation:—Dieulafoy's "Text-Book of Medicine," translated by V. E. Collins, M.D. Lond.; a third edition of the "Manual of Massage," by M. A. Ellison; a second edition of "Practical Microscopy," by F. Shillington Scales, F.R.M.S.; a new edition of "Aids to Analysis of Food and Drugs," by C. G. Moor, F.I.C., and W. Partridge, F.I.C.; a third edition of "Aids to Mathematics of Hygiene," by R. Bruce Ferguson, M.D.; "Sanatorium Treatment of Tuberculosis," by Rufenacht Walters, M.D.; "Surgical Anæsthesia," by Bellamy Gardner, M.R.C.S.; a second edition of "Chemical Notes and Equations," by G. H. Gemmell, F.I.C.; "Gynaecological Therapeutics," by S. J. Aarons, M.D.; "Incidence of Sex and Age on Disease," by J. Grant Andrew, F.F.P.S.; and a second edition of "Menstruation and its Disorders," by Arthur E. Giles, M.D.

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We have received from Messrs. Baillière, Tindall and Cox a pamphlet entitled "The Re-Education and Self-Control in the Treatment of the Morphine Habit," written by Dr. Oscar Jennings. (1s. net.) In this pamphlet the author points out the folly of supposing that all morphinists are hopeless so far as treatment is concerned. Like all neurasthenics they are merely deficient in self-control. Therein lies the key to successful treatment of the morphine habit. Drugs should be used as little as possible. Restoration of will-power should be aimed at. There is much commonsense in the author's teaching, and he deserves a careful hearing. Those of our readers who imagine that morphomania is incurable should procure this pamphlet and inwardly digest its contents. It contains much that is suggestive and encouraging with reference to the therapeutics of this unfortunate habit.

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MR. H. K. LEWIS informs us that he has purchased the remainder of the stock of the New Sydenham Society's publications, comprising the collection of volumes on medicine and surgery, the Pathological Atlas, the Lexicon of Medical Terms, and the Atlas of Clinical Medicine, Surgery, and Pathology, issued by the Society during the years 1859-1907. Many of the works were of a pioneer character when issued by the Society, and have since acquired a classic and historic importance. The number of copies of each book has been of necessity limited on account of the heavy expense of warehousing a larger stock, and of many of the volumes only a small number remained over.

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MESSRS. KNOLL AND CO. have issued a booklet dealing with their preparations in an interesting and scientific manner. The work is quite small, and is entitled "Knoll's Materia Medica," but, as a matter of fact, its scope is much wider than the title implies, for apart from the chemical descriptions of the various preparations, each drug is treated separately and notes on its physiological action, the indications which require it, and the dose and mode of employment are all given. This information is conveyed on the right-hand pages throughout, and on the left pages are clinical notes giving in short, and frequently tabular form, the experience of medical men who have used the drug, as to difficulties, precautions, and so on, to be observed. In all, fourteen different preparations are thus dealt with, and they include digipuration, which is said to be digitalis without unpleasant effect, iodival, an organic preparation of iodine, lenigallol and engallol, both of which have acquired considerable favour, bromural and triferrin. The brochure is a handy thing to have on the consulting-room table, and many fresh suggestions will be found in it especially helpful in treating cases that drag on till all ordinary remedies are exhausted.



## LABORATORY NOTES.

### MOUILLA—A NEW LIQUID SOAP.

MOUILLA is a liquid soap, made with pure potash, and composed largely of high quality oil and glycerine (B.P. 1.260). In appearance it resembles olive oil, and in use one has to pour a drop into the palm of the hand, rubbing as with ordinary soap, when a capital lather is produced. It is also claimed to have the advantage of lathering in the hardest water, of cleansing better than hard soap, of preventing chapping and irritation of the skin, and of rendering the hair silky and glossy. As a toilet soap these are great recommendations, and for the surgeon who is busy with operations and dressings they are godsend. We have tested this *savon de luxe* for ordinary purposes, and can cordially recommend medical men to try it for themselves.

## MEDICAL NEWS IN BRIEF.

### North-East London Post-Graduate College.

THE vacation course of the North-East London Post-Graduate College is to be held this year from September 6th to September 18th at the Prince of Wales's General Hospital, Tottenham, N. There will be continuous arrangements for study during the fortnight from 10 a.m. to 6 p.m. each day, which will comprise demonstration and pathology, on clinical methods, on selected clinical cases, with clinics, clinical lectures and discussions. The fee for the course is two guineas; a syllabus, with further information, may be obtained from the Dean of the School at the Hospital, or at 142 Harley Street, London, W.

### The International Congress of Nurses.

THE meeting of the International Council of Nurses to be held in London at the Church House on July 19th, with the four days of open Congress at Caxton Hall and the Church House on the 20th, 21st, 22nd and 23rd, is expected to be the most remarkable gathering of nurses yet held as to numbers, cosmopolitan character, and distinction of individual members who are coming. Many of the most prominent women in nursing organisation, and who have taken a leading part in advancing the education, training, and special new lines of work for the nurse, are to take part in the proceedings. The subjects to be discussed are varied, and disclose the extent of the demands made upon the trained nurse of to-day, as well as the ever-widening opportunities offered to her.

The officers of the International Council of Nurses are:—Hon. President, Mrs. Bedford Fenwick, London; President, Miss S. B. McGahey, of Australia; Hon. Treasurer, Miss Margaret Breay, London; and Hon. Secretary, Miss L. L. Dock, the United States.

Among the Presidents of National Councils of Nurses are:—Miss Snively, Lady Superintendent of the Toronto General Hospital, Canada; Miss Annie Goodrich, Superintendent of Nurses of Bellevue and Allied Hospitals, New York; Sister Agnes Karll, of Germany; Miss Tilanus, of Holland; Mrs. Henny Tscherning, of Denmark; and the Baroness Mannerheim, of Finland.

At the session on Tuesday, the 20th, the topics discussed will be "Education and Registration," "The Nurse in Private Practice," and "School Nursing"; on Wednesday, "The Nurse as Citizen," dealing with district nursing, social service work, and preventive efforts on various lines, and "The Relations of Nursing and Medicine"; on Thursday, "The Care of the Insane," "Professional Organisation," and "The Nurse as Patriot," covering Army nursing, Naval nursing, etc.; on Friday, "Mission Nursing and Morality in Relation to Health" will be considered. There will be an interesting nursing exhibit of practical appliances, inventions, and devices, books, journals and reports.

### The Mineral Springs of Bath.

LAST week Sir Malcolm Morris, F.R.C.S., was invited by the Corporation of Bath to formally open

a new departure within the beautiful grounds of this historical city. Hitherto, visitors had perforce to drink the mineral waters in the famous Pump Room, but there was no provision made for "taking the waters" in the open during the spring and summer months. To provide pleasant surroundings for the summer cure-guest the Corporation have now erected in the Institution Gardens a handsome colonnade and a fountain, where the hot mineral waters will be served. It would be difficult to find anywhere more beautifully situated grounds. The band plays under the trees in the gardens; gay flower beds and comfortable chairs are everywhere. Near the colonnade is a bit of old masonry—all that is left of the Monk's Mill, once the property of the monks of Bath Abbey when the gardens formed part of the Abbey grounds. The Roman culvert runs underground near by, conveying waste water from the baths, exactly as it did nearly 2,000 years ago.

Drinking the waters in the open air has always been recognised as one of the enjoyable features of Continental spas, which the English health resorts have been slow to adopt. The opening of the fountain and colonnade indicates that not only in the autumn and winter, but also in the spring and summer, is the comfort and enjoyment of visitors considered.

Bath has been bestirring itself in other directions of late. It is to have a "Historical Pageant" during the present month. It has just issued "Bath as a Health Resort," beautifully illustrated in colours, and it is sending its "Sulis" water of known therapeutic value in bottles to all parts of the kingdom. These are encouraging signs that the authorities entrusted with our home health resorts are anxious to compete with the claims of foreign spas, and it affords us pleasure to record the fact.

### Irish Questions in Parliament.

DURING the past week, Mr. Kettle asked the Chief Secretary for Ireland on what grounds Steevens Hospital is selected by the Royal Irish Constabulary for the treatment of constables; whether the hospital enjoys a monopoly among Dublin hospitals for Royal Irish Constabulary patients; what sums per week are deducted from the pay of Constabulary patients and handed over to the hospital authorities; and whether he will explain why two patients suffering from tubercular disease of the lungs, one of whom died, were recently accommodated in the common ward, to the danger of all the other patients.

Mr. Birrell replied that the Constabulary authorities informed him that Steevens' Hospital was selected for treatment of constables on the ground of its proximity to the depôt, and the desirability of having one hospital where special wards could be set apart and kept available for members of the force. It enjoyed a practical monopoly in Dublin for the treatment of Constabulary patients. Single men paid 2s. 3d., married men 1s. 4d., and recruits 1s. 10d. per day for the treatment. One patient who had tubercular disease of the lungs was retained for a time in the common ward on the responsibility of the doctor who was attending him, but was removed before his death.

Mr. Hugh Barrie asked the Chief Secretary whether it is proposed to affiliate the Mater Infirmorum Hospital (Belfast) to the new Belfast University; and, if so, are its teachers and teaching to be recognised; and will the members of its medical staff be admitted upon the Examining Board of the University.

Mr. Birrell: It is not proposed to affiliate the Mater Infirmorum Hospital to the Queen's University. It is proposed by the Medical Faculty that the hospital should be recognised as a place of clinical teaching, as it was by the old Queen's College, but this is subject to the approval of the Senate. The appointment of examiners is for the Senate upon the recommendation of the Academic Council. I have no means of knowing how far the medical staff of this or any other hospital will be recognised by the Senate.

### Guy's Hospital Medical School.

At the annual distribution of prizes to the successful students of Guy's Hospital Medical School, on Friday last, the Dean, Dr. Eason, read his annual report, in the course of which he stated that the entry of students

from October, 1907, to October, 1908, was approximately the same as that of the previous twelve months. The number of students who qualified was also about equal to that of the previous year. From the returns of the General Medical Council, the number of students entering the profession was still much below that of a period of from 10 to 15 years ago. This fact was probably due in some degree to the overcrowding of the profession which resulted from the large entries into the medical schools of London at that time, and also to the increase in the cost of the medical curriculum; but it was interesting to note that this period of depression in the profession seemed to be passing away, and there was no doubt that at the present time the demand for qualified men far exceeded the supply. Applications were being daily received from provincial hospitals unable to get the medical officers they required, and the income that could be made by the recently qualified man was certainly much higher than it was a few years ago. The Dean mentioned that the medical school received no subvention from the hospital funds.

#### **Tribute to Work of Liverpool School of Tropical Medicine.**

THE Liverpool School of Tropical Medicine has received the following letter from the African Association, Limited, viz. :—

"I beg to hand you herewith cheque for £50, being a supplementary grant made to your school by the shareholders of this company, at their meeting of 1st inst., in recognition of the fact that 1908 was the first year in the history of the company in which there had not been a death in the whole of our coast staff."

Colonel Seely, who, as Under-Secretary of State for the Colonies, was notified of the action of the African Association, writes as follows, viz. :—

"Colonel Seely desires me to thank you for your letter enclosing a cutting from the Liverpool paper giving an account of the annual meeting of the African Association. He was glad to see the very practical tribute which was paid by the association to the work of the School of Tropical Medicine."

#### **Irish Medical Schools' and Graduates' Association.**

THE summer general meeting and luncheon will be held at 1.30 p.m. on Wednesday, July 28th, at the Medical Institute, Belfast, the President, Albert Mouillot, Esq., M.D., T.C.D., in the chair. It is hoped as many members as possible will attend. Guests, ladies or gentlemen, may be invited. The charge for luncheon will be 3s. each, to be paid at the time, but in order to make the necessary arrangements and reserve seats, it is desirable to inform Dr. Douglas, Goudhurst, Kent, as soon as possible.

### **PASS LISTS**

#### **University of Glasgow.**

THE following candidates (alphabetically arranged) have satisfied the examiners in the Fourth (Final) Professional Examination for the degrees of Bachelor of Medicine (M.B.) and Bachelor of Surgery (Ch.B.) :

William S. Alexander, M.A., Andrew C. Anderson, William Anderson, James C. Auchencloss, David Barbour, Arthur M. Bayne, George T. Bogle, David Y. Buchanan, Carl J. B. Buchheim, James Cairns, John A. M. Camerson, Andrew H. Clark, Donald J. Clark, James L. Cochrane, Rutherford Cramb, Charles Duguid, M.A., Donald Fisher, Edward J. Fitzgerald, George Fletcher, M.A., Robert Gale, Florence A. Gallagher, Edward G. Glover, Robert D. Goldie, John Granger, Kenneth C. G. Gray, Albert W. Gregorson, Euphemia A. Hay, William A. Hislop, William Howie, Bentley M. Hunter, James T. Kirkland, Alexander Leishman, William T. Lindsay, William M'Adam, M.A., B.Sc., William C. Macartney, William M'Connell, Donald M'Intyre, Robert B. Forbes M'Kail, Campbell Macmillan, John W. M'Nee, John H. M'Nicol, Jeanie D. M'Whirter, M.A., David Manson, Mary C. Mitchell, Hyacinth B. W. Morgan, John M'I. Morgan, Findlay Murchie, Frederic L. Napier, William Niccol, Charles M. Nicol, David Purdie, Jessie D. Rankin, John Robertson, Margaret E. Robertson, Robert C. Robertson, Hugh G. Robinson, Winifred M. Ross, William A. Sewell, B.Sc., James S. Somerville, Rich-

mond Stael, Alexander Stewart, Arthur F. Stewart, Robert W. Sutherland, David C. Suttie, Robert Sweet, Charles H. Wagner, Ethelwyn M. Walters, Hugh White, David M'C. Wilson, Henry J. Windsor David Yellowlees.

The following passed with distinction in the subjects indicated :—

In (a) Surgery and Clinical Surgery, (b) Practice of Medicine and Clinical Medicine, (c) Midwifery. David C. Suttie.

In (a) Surgery and Clinical Surgery, (b) Practice of Medicine and Clinical Medicine.—Robert Gale.

In (a) Surgery and Clinical Surgery, (b) Midwifery.—David Y. Buchanan, Andrew H. Clark.

In (a) Practice of Medicine and Clinical Medicine, (b) Midwifery.—George Fletcher, M.A.

In Surgery and Clinical Surgery.—William Anderson, Charles Duguid, M.A., Robert D. Goldie.

In Practice of Medicine and Clinical Medicine.—Edward G. Glover, Margaret E. Robertson, Winifred M. Ross.

In Midwifery.—James Cairns, William M'Adam, M.A., B.Sc., John W. M'Nee, John H. M'Nicol, Robert W. Sutherland, David Yellowlees.

#### **Conjoint Examinations in Ireland.**

THE following candidates have passed the First Professional Examination of the Royal College of Physicians and the Royal College of Surgeons, July, 1909 :—

M. J. Burns (with Honours), E. Harnett (with Honours), W. I. Adams, P. Ashe, J. C. Blackham, C. C. Boyle, E. Connell, J. D. Cherry, J. Crowley, J. Cohen, P. D. Daly, D. Donohoe, W. St. L. Dowse, T. R. Elliott, D. J. F. Flanagan, B. Goldberg, T. Gray, M. B. Gunn, M. Heenan, E. E. Hobson, F. J. Hunt, A. Humphreys, F. J. Kennedy, M. P. Lee, J. Magner, J. J. Magner, P. M. Moriarty, M. Morrin, B. J. Mullin, K. McGrath, F. T. McKenna, L. McKeever, J. W. O'Brien, T. F. O'Connor, J. P. O'Driscoll, E. B. Palmer, G. E. Pepper, B. Scher, N. A. Sheridan, R. Slaney, E. B. Stoney, J. C. Sproule, J. Stokes, T. S. Sullivan, F. C. Ward.

#### **The Royal University of Ireland.**

THE following candidates have passed the First Examination in Medicine :—

Nathaniel Bestie, Percy L. F. G. Bennett, Denis E. I. Byrke, John D. Carroll, Thomas J. Costello, Michael M. Davitt, Wilfred S. Dixon, William A. L. Dunlop, Edward C. T. Emerson, Thomas Farrell, B.A., Thomas Fennessy, Joseph Garry, William Gault, Stafford Geddes, John G. J. Green, Henry P. Hall, John F. Herbert, Thomas W. G. Hogg, Gerald L. Kennedy, Gordon D. Latimer, James H. Lawlor, Thomas J. Lydon, John B. Lyle, William S. Lynd, B.A., William J. McCracken, William M. H. McCullagh, Sch., William MacDermott, Patrick, McDonnell, James P. McLoughlin, George C. Maguire, Matthew Neilson, Eveline M. Noble, Mary J. O'Connor, Edward J. O'Keefe, Jerome J. O'Sullivan, Edith Robinson, Richard Shanahan, Herbert R. Sinclair, Thomas Walker, Michael J. Walsh, Thomas H. Wilson.

The following Candidates may present themselves for the further examination for Honours in the subjects set after their names. Those qualified in two or more subjects may present themselves for the further examination in all :—

Nathaniel Beattie (Botany, Physics), John D. Carroll (Zoology), Thomas J. Costello (Physics), William Gault (Physics), Stafford Geddes (Botany, Zoology), John G. J. Green (Zoology, Chemistry, Physics), John F. Herbert (Physics), Gerald L. Kennedy (Zoology, Chemistry), Gordon D. Latimer (Physics), John B. Lyle (Botany, Chemistry), William S. Lynd, B.A., (Botany, Physics), William M. H. McCullagh, Sch., (Botany, Physics), Patrick McDonnell (Zoology), George C. Maguire (Zoology), Jerome J. O'Sullivan (Chemistry, Physics), Edith Robinson (Zoology), Richard Shanahan (Chemistry, Physics), Thomas Walker (Botany, Zoology, Chemistry), Michael J. Walsh (Chemistry), Thomas H. Wilson (Botany, Chemistry).

## SUMMARY OF RECENT MEDICAL LITERATURE, ENGLISH AND FOREIGN.

*Specially compiled for THE MEDICAL PRESS AND CIRCULAR.*

**Meat Poisoning Due to Gaertner's Bacillus.**—McWeeney (*British Medical Journal*, May 15th, 1909) reports his observations on an outbreak of meat poisoning which occurred last winter in an industrial school for girls at Limerick. In all there were 73 cases of illness with 9 deaths. The symptoms in the earliest cases came on a few hours after partaking of a certain stew and cold beef, and death in one case occurred after about twelve hours' illness. All the deaths occurred within forty-eight hours. The symptoms, ushered in by severe headache, were those of acute gastro-intestinal irritation, nausea, vomiting and diarrhoea, followed in the more severe cases by profound collapse. Autopsies were made in three cases. From practically all the viscera examined, a typical strain of the bacillus of Gaertner was separated. The blood of those who recovered possessed agglutinins toward it. It was found to be highly pathogenic to rats, mice, rabbits and a calf, but guinea-pigs were immune. The source of the infection of the children was easily traced to a joint of cold beef, which had been served at dinner on the day the outbreak occurred, partly in stew, partly cold with cold bacon. The joint in question had been in the school premises for ten days—five days uncooked, and five days cooked. Part of the same joint was eaten on the third day after its arrival, and part on the fifth, without any ill effect. The beast, from which the beef came, had been killed at least five days before the meat was sent to the school. The beef was, therefore, at least 15 days old, but at the end of the first 10 of those days it was apparently innocuous. McWeeney found that cold beef experimentally inoculated with Gaertner's bacillus rapidly became pervaded throughout, while at the same time the meat showed no obvious alteration either to sight or smell. McWeeney suggests that the animal from which the beef was taken was infected prior to slaughtering, but in view of the fact that the beef was, if at all, very slightly infected five days prior to the outbreak, it seems more likely that it became infected accidentally in the larder during the last few days of its long stay. R.

**Ligation or Excision of Thrombosed Veins in the Treatment of Puerperal Pyæmia.**—Williams (*Amer. Journ. Obst.*, LIX., 5.) The author had five cases, four recovered and one died, a mortality of 20 per cent., which is in marked contrast with the average of 66 per cent. under the expectant treatment of puerperal pyæmia. From his experience he considers the operation valuable, and destined to save many lives if promptly performed. In one of his cases it jugulated the pyæmic process, and in the other three favourable cases appeared to shorten the course of the disease by weeks or months even though they might have recovered spontaneously. The extra-peritoneal method: It is impossible at the present time to express a definite opinion concerning the curative value of this method. The author has not been favourably impressed by the study of reported cases. One of its great disadvantages is the difficulty in determining which vessels are thrombosed, and the consequent necessity of making an incision in both flanks. Moreover, considerable difficulty may be experienced in differentiating the various vessels. On the other hand after laparotomy the vessels are easily differentiated, and the thrombotic process isolated, while the pelvic organs can be examined at the same time. The author considers the only plausible argument in favour of the extra-peritoneal method is the avoidance of peritoneal infection, but this danger is more apparent than real. He believes that the operation should be undertaken whenever a positive diagnosis can be made, while in those cases in which thrombosed vessels cannot be palpated through the vagina the determination to interfere should be

governed entirely by the general condition of the patient, and the abdomen should be opened if she is seriously ill and the clinical symptoms show no signs of improvement, in the absence of peritonitis or broad ligament abscess. All observers agree that the prospects of cure are far greater in the chronic than in the acute forms of pyæmia. As the general consensus of opinion seems to indicate the great superiority of the transperitoneal method, the *technique* of that method alone is considered. If the process is clearly limited to one spermatic, its ligation will complete the essential part of the operation. If there is any suspicion that both spermatics are implicated sutures should be applied on either side. Ligation is usually all that is necessary. If ligation of one or both spermatics is all that is indicated, and the process is not complicated by local inflammation, the prognosis is very favourable, and the patient has a good prospect of rapid and permanent cure. Beskofsky believes that in any event this should be the extent of the operation as if the process necessitates the tying of the hypogastric veins the prospects of cure are minimal and will be reduced by the manipulation. The best possible exposure should be obtained before applying the ligatures. Konatski observed frequent aberrations in the course of the venous trunks of the pelvis. Normally a vein collects blood from the base of the bladder and lower part of the uterus, and unites with another vein from the gluteal and rectal regions to form the hypogastric or internal iliac vein. Konatski has shown that in 30 per cent. the two vessels open separately into the external iliac vein, and so a ligature might easily be applied to the vein from the gluteal region instead of upon that from the uterus. The author gives tables of the reported cases operated upon by the two methods, and has based his paper upon the study of fifty-six cases treated by excision or ligation, fifteen extra-peritoneal, and forty-one trans-peritoneal, giving a mortality of 80 and 43.9 per cent. respectively. F.

**Suppurating Fibroids following Delivery.**—Hall (*Surg. Gyn. and Obst.*, VIII., 6).—Delivery was tedious, assisted with instruments under strict aseptic measures. On the third day, without any preliminary chill, the temperature rose to 104°, with very painful uterine contractions. Vaginal examination showed an irregular mass to the right of the uterus, and firmly in contact with it. The temperature continued high, in spite of salines and douches. The mass slightly increased in size; no fluctuation was found. After a few weeks, the patient still losing ground, it was decided to open directly above the mass. The omentum had become adherent to the uterus and right appendages, completely shutting off the right pelvis. On freeing this, two small interstitial fibroids, discharging pus from sinuses, and a third small fibroid in the cervical muscle, were found. The other organs were normal. The uterus was removed, but death followed from acute sepsis in 36 hours. In conclusion, in puerperal cases in which pus collects, evacuation by the vaginal route is to be preferred. Failing to reach pus from below, opening the abdomen should not be lightly considered; it is better to wait and try again from below. If the septic foci are confined to the uterus, vaginal hysterectomy is the operation of choice. Avoid all unnecessary interference with adhesions in septic cases. Consider them sacred, as Nature's breastworks. F.

THE first meeting of the Court of Governors of the College of Medicine, Newcastle, under its new constitution, was held in the Council Room of the College on July 8th. Sir George Hare Philipson was unanimously elected Chairman, and Ald. W. J. Sanderson, J.P., Vice-Chairman of the Court.

## NOTICES TO CORRESPONDENTS, &c.

**CORRESPONDENTS** requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

### SUBSCRIPTIONS.

SUBSCRIPTIONS may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, £1s.; post free at home or abroad. Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially-appointed agents. Indian subscriptions are Rs 15.12. Messrs. Dawson and Sons are our special agents for Canada.

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**ORIGINAL ARTICLES OR LETTERS** intended for publication should be written on one side of the paper only and must be authenticated with the name and address of the writer, not necessarily for publication but as evidence of identity.

**CONTRIBUTORS** are kindly requested to send their communications, if resident in England or the Colonies, to the Editor at the London office; if resident in Ireland to the Dublin office, in order to save time in reforwarding from office to office. When sending subscriptions the same rule applies as to office; these should be addressed to the Publisher.

J. H. M. (Aberdeen).—We have perused the cutting from the journal enclosed in your letter. In answer to your question, we are compelled to say that we hardly think it conducive either to the dignity of the profession concerned, or the status of the individual, to have testimonials published in a lay newspaper in the context for a medical post. Probably the candidate has been the victim of some imprudent friend, or some over-zealous pressman. Such a step could hardly have been taken with his sanction.

PORTSMOUTH.—The references marked in *The Portsmouth Times* are hardly such as recommend themselves to our ideas of the dignity which is supposed to pertain to our profession. Under the guise of a review it becomes what might aptly be described as a "flaming advertisement" of the author. But it is probably occasioned by an over-zealous and injudicious friend. At least we hope so.

Mr. F. H. J.—Communication received as we were "at press." Will be considered in due course.

Q. E. D. (North Wales).—In many cases the sphygmogram has an undoubted clinical value. As a general rule the exigencies of ordinary private practice do not permit of the use of this method of diagnosis. It would be unwise, however, to imagine that graphic methods in head disease have no practical place in the consulting room of the up-to-date country practitioner.

Dr. SAUNDERS.—Thanks for letter and circular—the matter shall be attended to. As to the serum treatment of tetanus, it should certainly be tried, although it must be regretfully admitted that the mortality of the disease has not been hitherto greatly reduced by the introduction of the serum. However, the patient should not be deprived of the additional chance of recovery from a grave condition afforded thereby.

## Meetings of the Societies, Lectures, &c.

### WEDNESDAY, JULY 14TH.

**MEDICAL GRADUATES' COLLEGE AND POLYCLINIC** (22 Chenies Street, W.C.).—4 p.m.: Mr. A. H. Tubby: Clinique (Surgical). 5.15 p.m.: Lecture: Mr. A. Lane: The Surgical Treatment of Constipation.

### THURSDAY, JULY 15TH.

**MEDICAL GRADUATES' COLLEGE AND POLYCLINIC** (22 Chenies Street, W.C.).—4 p.m.: Sir Jonathan Hutchinson: Clinique (Surgical). 5.15 p.m.: Lecture: Dr. J. Collier: Disseminate Sclerosis (illustrated by cases).

### FRIDAY, JULY 16TH.

**SOCIETY OF TROPICAL MEDICINE AND HYGIENE** (11 Chandos Street, Cavendish Square, W.).—8.30 p.m.: Dr. J. P. Maxwell (Amoy): (1) A Case of Amoebic Abscess of the Spleen; (2) A Case of Black-water Fever.—Dr. G. P. Woolley: Preventable Diseases in Siam.—Lieut.-Colonel J. R. Forrest, R.A.M.C.: Fevers in Rangoon.

**MEDICAL GRADUATES' COLLEGE AND POLYCLINIC** (22 Chenies Street, W.C.).—4 p.m.: Mr. G. S. Hett: Clinique (Ear, Nose, and Throat).

**CENTRAL LONDON THROAT AND EAR HOSPITAL** (Gray's Inn Road, W.C.).—3.45 p.m.: Lecture: Dr. W. Wingrave: Clinical Pathology.

## Appointments.

BALL, W. G., F.R.C.S. Eng., L.R.C.P. Lond., Junior Demonstrator of Pathology at St. Bartholomew's Hospital.  
BARRIS, J. D., M.R.C.S., L.R.C.P. Lond., Demonstrator of Midwifery at St. Bartholomew's Hospital.  
DAVIES, H. MORRISTON, M.C. Cantab., F.R.C.S. Eng., Assistant Surgeon to University College Hospital.

ETHERINGTON-SMITH, R. B., M.B., B.C. Cantab., Demonstrator of Anatomy at St. Bartholomew's Hospital.  
FISHER, J. B., M.D., C.M. Edin., D.P.H., Certifying Surgeon under the Factory and Workshop Act for the Whitehaven District of the county of Cumberland.  
GASK, G. E., F.R.C.S. Eng., L.R.C.P. Lond., Demonstrator of Operative Surgery at St. Bartholomew's Hospital.  
HOWELL, C. M. H., M.B., B.Ch. Oxon., Demonstrator of Physiology at St. Bartholomew's Hospital.  
MOORE, R. FORSTER, F.R.C.S. Eng., B.C. Cantab., Demonstrator of Anatomy at St. Bartholomew's Hospital.  
PRITCHARD, HAROLD, M.D., B.S. Lond., Junior Demonstrator of Pathology at St. Bartholomew's Hospital.  
TATHAM, C. J. W., M.R.C.S., L.S.A., D.P.H., Assistant Medical Officer of Health of Scarborough and Medical Officer of Schools.  
WEAVER, A. E., M.D., Ch.B., D.P.H. Birm., Medical Officer of Health of Aberdillery.

## Vacancies.

Birr Union, Frankfort Dispensing District.—Medical Officer. Salary £120 per annum, with Registration and Vaccination Fees. Immediate application to William Lowry, Clerk of Union (see advt.).  
Worcester County and City Asylum, Powick.—Third Assistant Medical Officer. Salary £140 per annum, all found. Applications to the Superintendent.  
Westmoreland Consumption Sanatorium.—Resident Medical Superintendent. Salary £300, with board and residence. Applications to W. B. Parker, M.D., Stricklandgate, Kendal.  
Whitehaven and West Cumberland Infirmary.—Resident House Surgeon. Salary £120 a year, with board and lodging. Applications to W. H. Sands, Secretary.  
Govan Parish School Board.—Principal Medical Officer. Salary £500 per annum. Applications to Mr. M. MacLeod, Clerk to the Board, 151, Bath Street, Glasgow.  
West Riding Asylum, Wadsley, near Sheffield.—Fifth Assistant Medical Officer. Salary £140 per annum, with board, etc. Applications to the Medical Superintendent.  
Wolverhampton Union.—Assistant (Resident Medical Officer), etc. Salary £140 per annum, together with apartments, rations, and washing. Applications to Frank Harrison, Clerk to the Guardians, Poor-law Offices, Wolverhampton.  
Berks County Asylum, Wallingford.—Second Assistant Medical Officer. Salary £150 per annum, with board, furnished apartments, attendance, etc. Applications to Medical Superintendent.  
Birmingham General Dispensary.—Resident Surgeon. Salary £200 per annum, including cab allowance. Applications to Ernest W. Forrest, Secretary, 32, Union Street, Birmingham.

## Births.

BENT.—On July 7th, at Vellum Hurst, Southfields, London, the wife of John Francis Gibbs Bent, M.D., of a son.  
BODINGTON.—On July 10th, at Books Acre, Worthy Road, Winchester, the wife of A. E. Bodington, M.A., M.D., of a son.  
MATHESON.—On July 6th, at "Kintail," Butler Road, Harrow, to F. M. Matheson, M.R.C.S., L.R.C.P., and Mrs. Matheson—a son.  
MILLIGAN.—On July 6th, at 18 Coates Crescent, Edinburgh, to Dr. and Mrs. Harley P. Milligan—a son.  
MOWLL.—On July 4th, at Boreford, Hook Road, Surbiton, the wife of R. Rothwell Mowll, M.D., B.S. Lond., of a daughter.

## Marriages.

GARDINER—TEGETMEIER.—On July 7th, at St. Thomas's, Regent Street, W., B. Hubert J. Gardiner, M.D., of Mount Adon Park, Dulwich, to Ida, daughter of W. B. Tegetmeier, Esq., F.Z.S., etc., of Alexandra Grove, North Finchley.  
HALE—GRUNDY.—On July 6th, at St. John's, Southwick Crescent, London, Robert Eugene Vaughan Hale, younger son of Dr. C. B. D. Hale, of 3 Sussex Place, to Dorothy Agnes, youngest daughter of Lieut.-Colonel F. L. Grundy, late Royal Warwickshire Regt., of 14 Ladbroke Terrace, London.  
MORRALL—MACDONOGH.—On July 7th, at the Church of St. Thomas of Canterbury, St. Leonards-on-Sea, Edgar Percy Basil, only son of Lt.-Colonel A. E. Morrall, of Halidon, Abergavenny, to Rose Ethel, youngest daughter of the late J. MacDonogh, Esq., M.D., of Bridge View, Killarney, Co. Kerry.

## Deaths.

MAYBURY.—On July 4th, at 27 Almeida Street, Islington, Florence Ada, the beloved wife of Horace Mansell Maybury, M.D.

### TO MEDICAL ELECTRICIANS AND MASSEURS.

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# IRISH POOR-LAW AND LUNACY INTELLIGENCE,

Being the Supplement to the "Medical Press and Circular."

WEDNESDAY, JULY 14TH, 1909

**Notice to Correspondents.**

Poor Law Medical Officers and other subscribers to THE MEDICAL PRESS AND CIRCULAR are invited to make use of the facilities provided by the Management of the Journal for obtaining information on all matters connected with the Poor-Law Medical Service or the Medical Profession generally in Ireland.

The Editor will be glad at all times to receive letters or marked copies of newspapers dealing with matters of medical interest. All communications must be addressed to the Office of the Journal, 18 Nassau-street, Dublin, and should be delivered not later than Saturday morning to ensure attention in the issue of the following week.

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**EVENTS OF THE WEEK.**

It rarely happens that the *Journal of the Irish Medical Association* contains anything of interest. The numbers for June and July are, however, exceptions. In the former there is a paper, startling in its outspokenness, by Dr. Foley of Ardraheen, on corruption in connection with dispensary appointments. Dr. Foley only states what is known to many but is only mentioned with bated breath, even the price to be paid, two years' purchase, is whispered about. So long as this widespread corruption, was recognised only in gossip, it was possible to ignore it, but now that in its own *Journal*, a sweeping charge has been made, the Irish Medical Association is bound to take the matter up and thoroughly investigate it. It will have to consider whether it will not be forced to alter its policy as regards Dispensaries and the remuneration of medical officers; and withhold its support from efforts to obtain increase of pay where there is any suspicion of corruption.

In the July issue a letter is published from Dr. John D. Crinion, in which, because the ballot for the five elected members of the Committee of Council did not result as he wished,

he raises for the first time in the history of the Association the religious question. This is to be deplored, but what is more deplorable, what is inexcusable, is the publication of the letter in the *Journal*. The Editor is not a new member; he is the Hon. Secretary of the Association; and he knows that Sectarian and Political matters are excluded, and it was plainly his duty to have deleted all references of the sort from Dr. Crinion's letter.

We report in another column the reply given by the Local Government Board with regard to the power of the Castlereagh Guardians to impose the adoption of a scale of fees on candidates for the Ballaghaderreen Dispensary District. A more shuffling declaration that Board never made. It is illegal, says the Board, to make assent to a scale of fees a condition of appointment, but you can ask the candidates whether they will assent, and act accordingly. We reiterate the statement made a few weeks ago, that assent to a scale of fees can be revoked at any time.

The Local Government Board have written to the Ballycastle Guardians stating that the



dispensary medical officers need not be included in the officers' insurance policy under the Workmen's Compensation Act.

Ireland is, after Germany, perhaps the best vaccinated country in the world, and, in consequence, the most free from small-pox. Irish people, though slow to move in health matters, are not by any means adverse to enlightenment, and they have always shown themselves ready to be guided by those with expert knowledge. Fads, therefore, such as anti-vaccination and anti-vivisection, have never prospered in Ireland. It is, then, with some surprise that we learn that an active anti-vaccination campaign is being carried on in the County Wexford. Both in the local newspapers and by public meetings the anti-vacks are making themselves heard. We do not anticipate much success for them in this country.

#### SALARIES IN CASTLEREA.

At the last meeting of the Castlereah Board a Sealed Order was received from the Local Government Board fixing the salaries of Drs. O'Donohue and Donnellan for the reconstructed Dispensary Districts of Castleplunket and Ballinlough. The fixing of these salaries has been a long-standing dispute between the Guardians and the Local Government Board, and on Saturday, the 19th inst., the Guardians passed a resolution of protest against the Local Government Board fixing the salary at the figures stated, and they themselves fixed the salary of Dr. O'Donohue at £112, and Dr. Donnellan at £130, with the result the Local Government Board sent down the Sealed Order with a letter stating:—"The Local Government Board have carefully considered the Guardians' proposal with regard to the salaries of these officers, and they regret that they cannot accept the view that a smaller salary should be fixed for each of the officers concerned than that proposed in the Board's letter of the 20th ult. The increased salary in Dr. O'Donohue's case was fixed in accordance with a scale formulated by the Board when dealing with alterations of Dispensary Districts in connection with the Local Government (Ireland) Act, 1898. This scale was found to work satisfactorily, and was not objected to by Boards of Guardians in any of the numerous cases in which it was applied. The Board have issued an Order under seal (copy of which is enclosed) fixing the salaries at £140 a year in the case of Dr. Donnellan, and £122 a year in the case of Dr. O'Donohue. The issue of the Order will not preclude the Guardians from considering the advisability of suggesting a scale of graded salaries for the various medical officers of the Union, which is a matter the Board have strongly urged upon them on several occasions.

We are glad to see that in this matter the Local Government Board has kept to its point.

#### ELECTIONS.

Dr. Dodd has been elected Medical Officer of the Ballymore-Eustace Dispensary District of the Naas Union at a salary of £125 rising to £150 a year, with £5 as Medical Officer of Health. There was no other candidate. It would be interesting to learn what are the duties expected from the Medical Officer of Health for the sum of £5.

Dr. Coen of Frenchpark has again been elected Medical Officer of the Ballaghaderreen Dispensary District, his previous election having been declared invalid by the Local Government Board, on account of the Guardians compelling candidates to accept a scale of fees.

#### SALARIES IN YOUGHAL UNION.

At a recent meeting of the Youghal Guardians, an increase of £20 in each of their salaries was granted to the medical officers of the Union. The salaries previously paid were respectively £155, £150, £120, £120, to four dispensary medical officers, and £120 to the Workhouse medical officer.

#### CASTLEBAR UNION.

##### "THE NEW GRADE."

The Local Government Board wrote drawing the attention of the Guardians to a suggestion contained in Form L in the half-yearly report of Dr. Hopkins, in which he suggested the advisability of the Guardians adopting a graded scale of salaries for the medical officers in the Union.

Mr. J. P. Canning—It is a great wonder they don't suggest a reduction in the salaries of the doctors.

Mr. T. Canning—The letter is an absurd one.

Clerk—A graded scale has been adopted in a great many unions.

Mr. J. P. Canning—And in a great many unions it has not been adopted.

Mr. T. Canning—Well, it won't be adopted here.

Mr. T. Moran—Dr. Hopkins is getting over £200 a year, and I consider he is well paid.

Mr. Prendergast—But he is doing two men's work.

The communication was marked "read."

#### BALLINA UNION.

Dr. Lang, late Medical Officer of Ballina Dispensary District has been unanimously voted a superannuation allowance of £60 by the Board of Guardians.

The Local Government Board wrote requesting to be informed whether the water supply was now satisfactory.

Mr. Melvin—No, nor never will be.

Mr. Gaughan—There is a committee of both bodies to meet.

The Clerk, in reply to Mr. Quigley, said the committee had not yet met.

#### QUESTION OF A SCALE.

The Castlereah Guardians were specially summoned last week for the appointment of a doctor for Ballaghaderreen Dispensary. About a month ago Dr. J. A. Coen was unanimously appointed on his signing a scale of fees approved by the Guardians. Dr. Beirne, who was also a candidate, but refused to sign the scale, appealed to the Local Government Board, who ordered a re-election on the ground that it was illegal to make the appointment conditional. The Guardians might ask the candidates to sign the scale, but they could not coerce them into doing so. The same candidates were before the Board on Saturday.

Mr. Murphy said they would elect no doctor who did not sign the scale of fees.

Mr. Grogan proposed the appointment of Dr. Coen, who had been for 17 years the doctor for Frenchpark District.

Dr. Beirne said that owing to the absence of his supporters he was reluctantly compelled to withdraw his application, and Dr. Coen was unanimously elected amidst applause.

#### TEMPORARY SERVICES.

Dr. Dolan of Kilnaleck having been summoned to attend at Cavan Quarter Sessions, intimated the same to the Relieving Officer who asked Dr. McQuaid, Ballyjamesduff to do temporary duty. Dr. Dolan being away for two days, Dr. McQuaid sent in an account to the Guardians for £2 2s. od., which they ordered to be paid, resolving at the same time to deduct the amount from Dr. Dolan's salary, as the case upon which the doctor was engaged was not a crown case. Dr.

Dolan wrote a long letter to the Board accusing the Relieving Officer of favouritism inasmuch as he had intimated to that gentleman that Dr. Ryan of Finea, would act if required. He further stated that the appointment made was highly objectionable to him, and he considered the act designedly offensive, and wished to be informed if he could be made to pay for a substitute who was not called in accordance with the Dispensary Regulations.

A letter was, however, read from Dr. McQuaid regretting that the Guardians contemplated deducting the amount of his fee from Dr. Dolan's salary, and stating that inasmuch as he had never taken a fee from a medical man for any professional services rendered, he could not make an exception in this case, and would not, therefore, accept any remuneration. The Board acknowledged their obligation of Dr. McQuaid's action, which they considered both generous and gentlemanlike. A letter was then read from Dr. Dolan, asking for his usual holidays, and nominating Dr. Ryan, Finea, as his substitute. The Board, however, appointed Dr. Clarke, Cavan.

#### WORDS AND WORKS.

As recorded in a recent number of the SUPPLEMENT, Dr. Ross, Medical Officer of the Ballykelly Dispensary District in the Limavady Union, was forced by ill-health and considerations of age, to return after a period of service extending to forty-two years. According to the observations of the Guardians and the encomiums which were showered upon him by the members present at the meeting at which his resignation was received and accepted, no dispensary medical officer ever discharged his duties more faithfully, more efficiently or with more acceptance to the poor amongst whom he laboured. The Guardians felt themselves reluctantly and with sorrow obliged to appoint a successor, and issued advertisements for a duly qualified practitioner at the old salary. Notice of motion was also given to consider on the same day the question of Dr. Ross's superannuation. There was only one candidate for the position, viz., Dr. E. J. Martin of Dungiven, who was, of course, amidst a great flourish of trumpets unanimously elected. In offering his congratulations to Dr. Martin the Chairman informed him "the position he would have to fill was a difficult one, and his money would be hardly earned, indeed doctors always earned their money under great hardships. He was going to succeed Dr. Ross whose devotion to duty was so well known, and universally recognised. Dr. Ross had been fifty years doctor in the Dispensary District of Ballykelly, and his kindness and benevolence would have a lasting effect among the people. Astronomers told them that light from celestial bodies only struck the eye after travelling millions of miles through space and this light continued to exist for hundreds of years after the luminary from which it emanated had ceased to exist. In like manner Dr. Ross by his worth and work had shed a light throughout the community where he laboured which would continue to exercise a beneficial influence long after he himself had passed away. In conclusion he hoped Dr. Martin would uphold the worthy traditions of the dispensary to which he was appointed." Dr. Martin, of course, in reply said he would do his best and the Guardians proceeded to discuss the amount of superannuation allowance they would grant to their late officer. One member proposed and it was duly seconded, that the maximum pension, viz., £87 5s. 8d. a year be granted. It was then moved and as an amendment also seconded, that only £50 a year be granted. The amendment was carried by a majority. Dr. Ross could have resigned on the passing of the Local Government Act and claimed full pension as a matter of right, so that during the past ten years he has been saving the Guardians the salary of a successor. It is such treatment as this that keeps candidates away, and we are greatly surprised that even one could be found to accept the position of dispensary doctor under such a system.

#### THE HEALTH OF DUBLIN.

The annual rate of mortality in Dublin, which had been equal to 15.7 and 19.6 per 1000 in the two preceding weeks, declined again to 18.5 in the week ending July 3rd. During the 13 weeks of last quarter the death-rate in the city averaged 20.9 per 1000, whereas the mean rate during the same period did not exceed 13.5 in London and 15.8 in Edinburgh. The 141 deaths of Dublin residents from all causes registered last week showed a decline of nine from the number in the previous week, and included 13 which were referred to the principal epidemic diseases, against ten and eight in the two preceding weeks. These 13 deaths were equal to an annual rate of 1.7 per 1000, the death-rate from these epidemic diseases being equal to but 0.8 in London, and 0.9 in Edinburgh. Of the 13 deaths from these epidemic diseases in Dublin last week, five resulted from diarrhoea, four from whooping-cough, two from measles, and one each from scarlet fever and diphtheria, but not one either from "fever" or small-pox. The fatal cases of diarrhoea exceeded the number in any recent week, while those of whooping-cough showed a slight decline. The 141 deaths at all ages included 31 of infants under one year of age, and 44 of persons aged upwards of 60 years; the deaths of elderly persons exceeded the numbers in recent weeks. Four inquest cases and two deaths from violence were registered during the week; and 60, or 42.6 per cent., of the deaths occurred in public institutions. All the causes of death registered in the city last week were duly certified either by a registered medical practitioner or by a coroner; in London the causes of all but one of the 1,029 deaths last week were duly certified, and in Edinburgh 2.2 per cent. of the causes of death were uncertified.

#### THE TUBERCULOSIS ACT.

At the Fermanagh County Council a letter was read from the Local Government Board enclosing a memorandum explaining the object of the Tuberculosis Prevention (Ireland) Act, 1908. They trusted that the new powers conferred by the Act for dealing with Tuberculosis would receive the earnest consideration of the Council.

The Secretary said this was a matter of great importance, and it would be better to adjourn the consideration of it till the next meeting, so that copies of the Act might be put into the hand of the members of the County Council.—This was agreed to.

The Navan District Council received a letter from the Local Government Board forwarding a draft of the Tuberculosis Act, and asking the Council to give it their earnest consideration.

Mr. Collins—What do they want us to do?

Clerk—To adopt Section 1 of the Act. If you do so it will make compulsory notification essential, and the doctor can see to the disinfecting of the house in which the consumptive patient is located.

Mr. Owens—If we adopt Part 1 of the Act it will be necessary, and within the power of the doctor to order the patient out of the house—in here or to some other place.

Clerk—I don't know if that compulsion will be resorted to.

Mr. Owens—It may, and I am opposed to Part 1 of the Act.

Mr. Collins—I propose that we do not adopt Part 1 or any Part of the Act. By adopting it we would be inflicting a great hardship upon people who have sick relatives suffering from some disease which might be supposed to be consumption.

Mr. Steen—Not "supposed," but patients really suffering from consumption.

Mr. Collins—I say "supposed," because I have seen cases where doctors have differed. I think the medical profession are trying to reap some pecuniary advantage by this scare which has been raised in Ireland by people

who are working with the best of intentions. If we enforce it people will be obliged to notify the sanitary authority that one of the family is suffering from consumption. Now a great many will object to that as an intrusion on the privileges of family life, and it should not be tolerated. He was sure that the family in which one of the members might happen to be affected with consumption would be as much concerned for the welfare of the poor patient, and would be willing and anxious to do whatever they could either by isolation or otherwise, as the sanitary authority would be.

Mr. Dwyer agreed with Mr. Collins, and seconded the resolution.

Mr. Steen said the doctors were anxious for compulsory notification, and perhaps in some cases if they thought fit, it might be advisable to have steps taken for the isolation. This (consumption) was a terrible speck on Ireland, and we who are not experts in the matter should do nothing to prevent these people from using the best means in their power to prevent the

spread of the disease. These medical men are instructed in this matter, and we should certainly be guided by them.

Mr. Owens said perhaps the matter might be postponed for further consideration.

Mr. Steen—We have never objected to the notification of measles or scarlatina. It is now well known that Tuberculosis is contagious.

Mr. Collins, replying to Mr. Owens, said he hadn't proposed the resolution without some consideration, and he had also interviewed people who knew more than he did, and if they did adopt Section 1 of the Act such people suffering from consumption must be isolated, and you have no place to isolate.

Mr. Owens—Be satisfied, Mr. Collins, by proposing a resolution to the effect that for the present we deem it inexpedient to adopt part one of the Act, and if we see fit we can do so afterwards.

Mr. Collins fell in with that suggestion, and the matter dropped.

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# THE MEDICAL PRESS AND CIRCULAR.

"SALUS POPULI SUPREMA LEX."

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No. 3.

## NOTES AND COMMENTS.

ONE of the distinguishing features of the proprietor of nostrums is the *Nostrum* fathomless, if perverted, ingenuity. Foiled in one quarter, he learns from experience, and thrusts out his tentacles more warily in waters lying outside the meshes of the law. One of the most recent devices is to insert a query from a correspondent describing some ailment, and asking if any readers of the journal who have had experiences in a similar direction can tell of any means of alleviating or curing this "awful" complaint. In the ensuing number, sure enough, comes the answer, probably dated from one of the oldest and most exclusive clubs in London. The writer recognises the disease from bare description, although a skilled medical specialist would probably require a careful and detailed examination before forming an opinion upon the case, and, having named the disease, what is easier than to name a remedy? In order that the whole world may share the benefit of the suggestion, the Editor does not limit the information to the original correspondent, but publishes in full the address, name and price of remedy, and its London agents. Further comment is needless, but it certainly looks as if patent medicine advertising were being more or less raised to the level of a high art.

### Medicine— Law.

THE annual dinner of the Medico-Legal Society, last week, helped to bring to general notice the desirability of medical men and lawyers meeting on common ground. The Society has been in existence for eight years, and the rapidly-increasing membership—no less than fifty new members joined last year—shows that it supplies what is called in current journalistic jargon a "felt want." The need for some means of bringing the two professions into contact, so that their agreements and disagreements may be realised, is of great importance, for the more that the good lawyer and the public-spirited medical man are associated, the more evident it becomes that, though they approach problems from different points of view, their ideal is the same. *Salus populi suprema lex*—the motto adopted by THE MEDICAL PRESS AND CIRCULAR more than seventy years ago—is the goal of each, but while the medical man, naturally, translates *salus* to himself as "health," the lawyer interprets it to mean, what Cicero originally intended it to mean, "security." Now, civil security, used in a narrow sense, may be understood to convey nothing beyond the rights of an ordinary citizen, but, in the light of modern ideas, it embraces not only safety from enemies, public and private, but that reasonable security from disease-producing conditions which we now consider as a right of citizenship.

IT is a fault no less of lawyers than of medical men that, with this common aim in view, they are inclined habitually to lay undue stress on that means of promoting it which lies—in their view—the most readily to hand. The lawyer sees his way through statistics and proved facts, and—if we may say so without undue conceit—the medical men sees his through common-sense founded on personal observation. Lawyers cannot, in the exercise of their profession, know facts at first hand, whereas medical practice leads directly to them. Herein lies the great gulf which separates the callings, the lawyer calling for proof and the doctor for action, each being apt to regard the other with a certain amount of impatience for not knowing or seeing things from his own point of view. Now, the Medico-Legal Society, composed as it is of doctors, lawyers and laymen interested in medico-legal matters, helps greatly to bring about a common understanding, and by creating an arena in which difficulties may be brought to issue. For such a Society we conceive there is a large field of usefulness. The Master of the Rolls, speaking at the dinner, dwelt particularly on the part which medical men play in the law courts, and he made the striking observation that medical men do not give evidence in court, in the usually accepted sense of the term, but that they give information to the court, information without which the court would be at a loss to know how to act. Moreover, he made play—and good play, too—of the old cant phrase about doctors differing. He could not conceive, he said, how men of different minds, confronted with grave and perplexing problems, could possibly always arrive at the same conclusion, for even in law it was his own duty every day to sit to revise the judgments of his colleagues, and his court in turn was subject to the still-further-considered opinion of the House of Lords. We have read nothing more encouraging of late than these words of Sir H. Cozens-Hardy, for it shows that in the morass of difficulties in which the profession is struggling the highly-placed members of the judiciary understand and appreciate their position, and that, unlike some of the lesser lights, they are averse from the cheap sneer which rises easily to the lips of those unversed and untrained in the real problems of social existence.

### Medical Training.

ONE of the greatest of the problems confronting the profession is that the training necessary for qualification is yearly becoming more and more exacting, and whereas twenty years ago a lad of eighteen with a decent school education could become qualified in four years without displaying any astonishing feat of mental gymnastics,

to-day, not only is five years the minimum, but fewer and fewer men take an ordinary qualification under seven years. After that follows—or certainly should follow—three or four years of work in subordinate, but responsible hospital posts, before a man enters on his life's work. Now, not only is this state of things a source of great expense and anxiety to the would-be doctor and his relatives, but medical men are finding that with the increased pressure to procure good professional training, the rewards of good work are becoming fewer and less enticing. Moreover, the medical man is regarded as a doctor, and nothing else, and he finds himself, in practically every department of life, the servant of those who have come through far less exacting ordeals than himself, and are consequently of a much lower grade of mental training and discipline. How galling this is to medical men we have examples every day in coroners' courts, the Army and Navy, and all public services in which the medical man is called upon to play a necessary, but subordinate part.

**Its Recognition—** A FURTHER example—if any be needed, is revealed in the just-published report of the Departmental Committee of the Colonial Office, which was appointed to inquire into the conditions of the West African Medical Department. The medical officers, even under the improved conditions instituted by Mr. Chamberlain, in the West African Colonies have many real grievances, and the Committee's report has been almost entirely in favour of the claims made for redress, though we need hardly say the reforms have been to a large extent rejected by the Colonial Office. All those changes which the Office thinks will save them trouble and give them a good supply of medical officers have, it seems, been adopted, whilst all those which would increase the dignity and usefulness of the members of the medical staff have been repudiated. Reading between the lines of the report, it is not difficult to see the old trouble with which the profession is faced has been encountered again in West Africa, namely, that the medical man is not allowed by the civil officials to be "boss of his own show." The class of man from which the Civil Service of the West African Colonies is recruited is notoriously greatly improved, and the Colonial Office now have at their command the services of a supply of fairly average men who, though they cannot obtain appointments in the better and healthier services, are a great improvement on the old ne'er-do-wells who used to man the staff. But, even so, it is anomalous, to say the least, that these gentlemen, whose education and mental endowments are of limited extent, should be set to "administer" medical men of far longer training and higher qualifications than themselves, and we find, as is not unnatural, that the doctors resent their drug bills being cut down and their duties fixed for them by officials of a very moderate order of capacity.

**And "Reward."** FURTHER still, the opportunities for a doctor to pass into the Civil Service and become an administrator are practically *nil*. His rewards are confined to his own branch of the service, and whereas an industrious district commissioner may reasonably look forward to becoming a Colonial Secretary or Governor, with a K.C.M.G. and considerable social precedence, the opportunities of a doctor are limited and restricted in the highest grades to becoming principal medical officer of a colony, with a doubtful C.M.G., half a

governor's salary, and no prestige. If medical services are graded on this basis, it is surely obvious that they will soon cease to attract the best men, who will naturally be put by parents who consider future conditions into the civil branch, and that if the lower type of man alone is attracted, not only will the health and lives of officials suffer, but, by ill-directed advice, the whole civilisation of the unhealthy Colonies will be hung up for generations. There is nothing more phenomenal, and nothing more creditable to medicine, than the immense improvement which has taken place in the health of Europeans on the "West Coast" in the last twenty years, and surely officialdom must be blind in the extreme if it refuses to recognise facts which are the common-places of the unofficial world.

## LEADING ARTICLES.

### THE FERMENT TREATMENT OF DISEASE.

WE regret to see that our contemporary, the *Times*, has been misled into making an assertion which appears to us unjustifiably premature, and therefore opposed to the true interests of science. The following quotation from a leading article on "Cancer Research," which appeared on July 10th, will explain the matter to which we allude:—"A year or two ago great praise as a remedy against cancer was bestowed upon a substance called trypsin, derived from the pancreatic secretion, and while Dr. Bashford himself does not condescend to notice it, we are informed by the executive committee that facilities for further experimentation by an entirely independent investigator on the means of checking the growth of malignant tumours by the injection of trypsin and other like preparations were afforded in their laboratories, and gave entirely negative results." This statement, we submit, is not justified by the facts, nor is it in accord with the spirit which animates all true scientific research, to condemn contemptuously a particular investigation or inquiry merely because a limited series of observations, occupying a few months, have yielded negative results. The subject in question is so exceedingly complex that quite possibly some years will elapse before any definite results can be obtained. Meanwhile the Imperial Cancer Research Fund have informed the public, through the *Times*, that nothing can be expected of any inquiry of the kind. Clearly, in assuming so arrogant a position, the authorities of the Fund have constituted themselves the arbiters of an inquiry, concerning the results of which no one can make an approximate forecast. It may, however, be of some interest to recount briefly the connection of trypsin with the cancer question. In 1905, Dr. Shaw-Mackenzie conceived the idea, based upon various investigations, of submitting to trial the hypodermic administration of trypsin in cases of inoperable malignant disease. Soon afterwards a sample of the preparation he used was forwarded by request to Edinburgh, with which a small series of mice with Jensen's tumours were injected. In one case the cancerous tumour gradually began to disappear, and, after the animal had been killed and the growth examined microscopically, it was found that the cancer cells were clearly undergoing disintegration. It was concluded at once that this disintegration of the tumour was due to the action



of the trypsin injection. Then was the doom of trypsin in the treatment of cancer sealed. From that time onwards the press of this country and abroad blazoned forth the immature results. There was no stemming the erroneous impressions, the false hopes, the cruel disappointments, excited by exaggerated statements, unsupported by scientific testimony, thus made public. Even one writer, in a flamboyant effusion, arrogantly assumed the rôle of a prophet, and in the columns of an evening journal hysterically waved a flag—metaphorically—upon which was inscribed in the largest letters, "The Conquest of Cancer." Furthermore, the same writer pursued his campaign by contributing a series of articles to a morning journal, in which the same prominence was given to similar preposterous statements. From that time the scientific interest in the action of trypsin in relation to cancer died, under a stigma of well-merited reprobation. Whatever its virtues, whatever its deficiencies, whatever its possibilities, despite the fact that at birth it was a normal offspring of scientific conception, there was no room for it in the world of science. It became, at once, from the point of view of science, a monstrosity, an object of universal abhorrence, totally unworthy either of concern or attention, and, still more, of scientific inquiry. With this not altogether surprising result Dr. Shaw-Mackenzie had nothing whatever to do. The public, nevertheless, had been informed by the press that this great discovery, claimed as having been made in Edinburgh, was being practised, with marvellous success, in almost every country in the world, save England. It is needless, however, to pursue further the recital of how the trypsin treatment of cancer came into being, and how it fared. Suffice it to say that the scientific feeling against it still persists, and yet the *furor* regarding the irresponsible allegations of its value having now been permitted to expire, the time seems to have come when the subject should be viewed from a purely scientific, judicial aspect, and especially so when the great problems are remembered which its introduction has initiated as the basis of scientific investigation. While the truth cannot be controverted that certain sufferers have derived considerable relief from the administration of trypsin in cancer, this fact is, nevertheless, of but little scientific import in itself; on the other hand, it undeniably affords valuable encouragement in the prosecution of the highly elaborate and exceedingly complex investigations into the ferment treatment which the use of trypsin has suggested. Moreover, these investigations are now being assiduously carried out by Dr. Shaw-Mackenzie in the laboratories of King's College Hospital, over which Professor Halliburton presides. It is true that Dr. Shaw-Mackenzie's investigations in the Cancer Research laboratory into the action and inter-action of several ferments, including trypsin, upon Jensen's tumours in mice, were negative as a whole. But clearly it is neither just nor generous to him to condemn *in toto* the researches which he carried out, constituting as they did a mere fragmentary beginning of a great inquiry. As he himself has said, while recording his results in the *Lancet*, "it is too early to conclude that these results are condemnatory of the whole theory of intra-cellular fermentation and ferment treatment in carcinoma. They refer solely

to the hypodermic method of administration or to particular combinations of the extracts employed." And who is there who could find fault with this plain statement of fact, having regard to the issues which are now involved? Indeed, the same argument, advanced by the Cancer Research Fund against the results obtained by Dr. Shaw-Mackenzie, might equally be advanced against the authorities themselves. The Fund has now been seven years in existence; it was founded for the express purpose of throwing light upon the ætiology of cancer. But, with every wish to be fair in our criticism, it is impossible to say more than that the Fund is still merely feeling its way in the elucidation of the problems presented to it. But while, however, the authorities of the Fund are apparently glad enough to shelter their operations behind the plea of the natural inability to show immediate results, they at the same time should not lose sight of the fact that fellow-workers in the same field of inquiry are equally entitled to similar consideration.

## CURRENT TOPICS.

### The L.C.O. and X-Rays.

It may seem hardly worth mentioning in a medical journal that the X-ray treatment of ringworm has been practised for some six years now with great success, but the fact is important from the point of view of the silly attitude adopted by a certain class of journal, which sees in any fresh discovery of medicine a damper to its own prestige. This "prestige" is created by liberal abuse of medical men who have fallen into error, and such journal finds that it pays with its readers to dwell with a vindictive and ghoulish delight on the mistakes, honestly committed, by professional men charged with a heavy responsibility, and guided by a science struggling to find its way out of a slough of superstition and unsound tradition. The treatment of ringworm was an opprobrium of medicine till the discovery of X-rays, and the application of the X-rays has not only revolutionised that treatment, but it rendered unnecessary the provision of special Poor-law schools for the segregation of infected children—a boon not only to the ratepayer, but incidentally to the cause of humanity, which rightly regarded the "barrack-school" with abhorrence. Some faddist of the "anti" type, however, started the cry that the use of X-rays stunted the development of the brains of the children on which they were used, and the cry was re-echoed by journals of the class we have mentioned. It is instructive to read, therefore, that the London County Council Special Schools Sub-Committee reported last week, in connection with the brilliant results attained by the treatment:—"We may add that it has been brought to our notice that a quite unjustifiable scare was raised recently as to a possible danger to the brain from the use of X-rays, and that there has been no case of damage or injury of any kind to the children treated in the school." We hope this fact will be duly noted in the quarters indicated.

### Declining Birth-rate in Liverpool.

A good deal of interest attaches to the Liverpool birth-rate, representing as it does a large town with a mixed population. For the last thirty years it has showed the general decline which has prevailed not only in other parts of the United King-

dom, but also in the Colonies and on the Continent. In the year 1848, the rate, with 541,031 population and 20,071 births, was 37.1 per 1,000. From that time there has been an almost regular downward curve, until, in the year 1908, with a population of 753,203, and total births to the number of 23,891, we find a birth-rate of 31.7 per 1,000. In spite of the prolonged decrease of births, there has been a steady increase of total population, the natural increase of which is, therefore, not seriously affected. Although the decrease in Liverpool is marked, it is by no means so great as in other parts of the country, and among the great towns having a population of over 100,000, Liverpool stands fourth highest as regards birth-rate. The net increase of births over deaths for the year 1908 was 9,961, and in only one district in the centre of the city was there any actual decrease caused by the excess of deaths over births. The extremely variable conditions of the various districts of the city may be gathered from the fact that in two the death-rate was 28.9 and 28.8 per 1,000, and in the lowest 12.0, 12.1 and 9. On the whole, the total city death-rate of 18.5 per 1,000 may be regarded as highly creditable to the local authorities.

#### **The Tuberculosis Prevention Act in Ireland.**

We have received from the Local Government Board for Ireland copies of the various orders issued under the Tuberculosis Prevention Act, together with an explanatory memorandum on the objects of the Act. We have already commented on certain unsatisfactory features in the Act, which will render its operation somewhat nugatory. It is to be hoped that the activity that is to take place will not be such as to rouse the hostility of the medical profession. Certain clauses of the memorandum, however, raise a suspicion that the attention paid to medical interests by the Local Government Board is not satisfactory. In particular, the suggestions as to the lines on which dispensary systems for tuberculosis are to be run appear altogether to neglect the rights of the private practitioner. We learn that the dispensary "is in reality much more than a mere out-patient department of a hospital; it is rather an educational dépôt or clearing-house through which nearly all the cases of tuberculosis in a district are passed. . . . Its functions are to attend to all cases of tuberculosis in the area it serves. Some of its cases it drafts into a sanatorium, others it places in hospitals, the remainder it looks after in its own homes through the services of the medical officer and a staff of nurses or health visitors." As far as we can judge from this language, it is the intention of the Local Government Board to deprive sufferers from tuberculosis of the care of physicians of their own selection, and drive or bribe them to the "dispensary." The entire treatment of tuberculosis is to be taken out of the hands of the profession generally, and given to the officials, medical officers, nurses, and health visitors of the "dispensary." This is not a plan likely to commend itself to the good opinions either of the medical profession or of the community at large.

#### **The Newspaper Press and Quackery.**

We publish to-day a letter from Mr. Henry Sewill on the above subject. It is couched in strong terms which we are bound to say are fully justified. It is impossible that editors, managers and proprietors of newspapers can be ignorant of the character of quackery, and especially the traffic in nostrums and bogus apparatus. The whole system has been elaborately exposed during late years by the medical papers, especially by ourselves. Analyses of great numbers of every class of "patent" medicine, showing their worthlessness for their purpose, as well as their insignificant money value, have been made by the British Medical Association, and published in the *Journal*. The Report of the Australian Royal Commission, which was noticed in at least some leading British newspapers, was also alone enough to fully lay bare the facts, whilst cases in the law courts of every grade have again furnished evidence enough to open the eyes of men much less astute than the directors of great newspapers. Some papers which formerly rejected quack advertisements, and took occasion to expose and denounce quackery, now admit the worst class of puffs. It is amazing to see that the proprietors of some of these papers allow their editors still to attack and lay bare a system of fraud from which they themselves are drawing great incomes. Fraudulent medical quackery forms one of the greater of the smaller—albeit sufficiently big—evils which at present afflict society. The injury falls in by far the greater part on the poor and ignorant classes. It is impossible to believe that it will for long remain ignored by statesmen capable of bringing the question before Parliament, and finding a remedy for at least the more glaring of the abuses of which we now complain.

#### **Hospital Abuse.**

THE recent Report of the Leith Hospital directors records a "growing conviction" that the dispensary branch of their organisation was abused by persons able to pay for medicines. The Committee felt loth to take the drastic step of closing the dispensary, but, short of that, they recommended a more stringent method of ascertaining whether the cases were really necessitous or not. They thought it quite possible to frame such a series of questions as would show the facts of the applicant's position. The Managers suggested that it would be sufficient to take, say, every fifth or every tenth case for inquiry. This recognition of a scandalous situation, it may be hoped, stands as a sign of the times. The self-criticism that marks the present age must infallibly extend one day to its charitable methods. Economically, the system of promiscuous alms that bestows gratis medical relief upon those who are able to pay for professional aid stands self-condemned. It is to be hoped that the citizens of Leith, having recognised the evil, will not be slow in applying the remedy. Why should not any person who fills up a form wrongfully be prosecuted for obtaining money, or its equivalent, under false pretences? The Leith hospital authorities have clearly defined the class that they wish to relieve by means of their dispensary, namely, persons not so poor as to be paupers, and not so well off as to be able to provide themselves with medicines and any little attendance when ill.

## PERSONAL.

THE PRINCE OF WALES, as Grand Prior of the Order of St. John of Jerusalem, at Marlborough House, on July 9th, presented the awards of the Order granted during the past year for saving life, and the Service Medals awarded for conspicuous services.

THE DUCHESS OF ALBANY presided at a meeting of the Executive Committee of the Jubilee Fund of the National Hospital for the Paralysed and Epileptic, Queen Square, on July 8th, for the purpose of making arrangements for the visit of the Princess of Wales on Saturday, October 9th, on which occasion Her Royal Highness will receive purses of £10 and upwards.

DR. J. W. EAKIN, District Medical Officer, Port of Spain East, Trinidad, is acting as Surgeon-General of that Colony during the absence on leave of Dr. H. L. Clare.

DR. H. BROWNE, Frankford, has sent in his resignation to the Birr Board of Guardians, having served in the position of Dispensary Medical Officer of the Frankford District for a period of nearly 50 years.

ON Saturday, July 10th, which was Degree Day at the University of Liverpool, Lord Derby, the Chancellor, conferred the honorary degree of M.Ch. on Mr. Robert Jones and Mr. William Thelwall Thomas.

THE late Dr. Percy Boulton, M.D., Consulting Physician to the Samaritan Hospital for Women and Children and to the British Home for Incurables, left estate valued at £20,500 gross. He bequeathed £100 to the Samaritan Hospital.

At the first meeting of the Council of the University of Bristol, on July 9th, Dr. Lloyd Morgan tendered his resignation of the office of Vice-Chancellor, and Sir Isambard Owen, M.D., Principal of Armstrong College, Newcastle-on-Tyne, was elected in his stead.

THE eighth International Congress of Tuberculosis was opened at Stockholm on July 8th in the Chamber of the Upper House of the Riksdag. M. Bourgeois, of Paris, presided, and the company included Prince Carl, Princess Ingeborg, and Prince Eugène, and there were also present delegates and representative scientists of all nations.

DR. E. T. BORN has resigned the office of Colonial Surgeon of the Falkland Islands. He entered the Colonial Civil Service as Assistant Colonial Surgeon of St. Lucia in 1901, and was transferred to the Falkland Islands two years later. He is to be succeeded by Dr. R. S. Earl, Commissioner and Medical Officer of the Virgin Islands.

THE Leyton Urban District Ratepayers' Association have affixed a memorial tablet to the birthplace of Sir Morell Mackenzie, 742 High Road, Leytonstone. The premises are near the tram terminus, and within five minutes of Leytonstone G.E. Railway station. The tablet was unveiled on Monday last.

ON Monday evening, July 12th, in the board room of the London Temperance Hospital, under the presidency of Alderman Sir T. Vezey Strong, Chairman of the Board of Management, a portrait of Dr. Dawson Burns was formally presented to the hospital. Dr. Burns was Hon. Secretary of the Provisional Committee in 1871-73, and has been the Hon. Secretary of the institution from 1873 to the present time.

THE Committee of the Royal National Orthopaedic Hospital (with which is incorporated the City Orthopaedic Hospital), announces that His Majesty the King has consented formally to open, at 12 o'clock on Friday, July 23rd, the new hospital which has just been completed in Great Portland Street.

MR. R. E. MONTGOMERY, formerly Professor of the Liverpool University, has been appointed to the post of Veterinary Bacteriologist of the East African Protectorate. For the past two years Mr. Montgomery has been attached to the sleeping sickness expedition of the Liverpool School of Tropical Medicine in association with Dr. Allan Kinghorn, and has made a special study of tropical diseases of animals.

THE third Norman Kerr Lecture of the Society for the Study of Inebriety was delivered by Professor Taav. Laitinen, M.D., Professor of Hygiene and Director of the Hygienic Institute in the University of Helsingfors, Finland, yesterday, in the lecture theatre of the Victoria and Albert Museum, South Kensington. The subject of the lecture was "The Influence of Alcohol on Immunity."

At a meeting of the West India Committee it was decided, on the suggestion of Mr. Owen Philipps, M.P., to send the following telegram to Mr. Chamberlain: "Mindful of all you have done for the West Indies and the Colonies, and the interest you take in the School for Tropical Medicine, the members of the West India Committee desire to express cordial greetings to you on the occasion of your birthday."

THE body of the late Dr. Cowas Lalca, M.D. Brux., J.R.C.P. Lond., L.M.S. Bombay, who was shot while endeavouring to protect Sir Curzon Wyllie, has been buried in Brookwood Cemetery. There was a large attendance of prominent Indian residents in London, and Viscount Morley, Secretary of State for India, was represented. The coffin bore the inscription "Dr. Cowas Lalca, of Shanghai and Bombay, died July 1st, 1909, aged 48 years," and was accompanied by many beautiful wreaths, including one from Lady Wyllie.

At the Festival Dinner held in aid of the funds of the Charing Cross Hospital at the Whitehall Rooms on July 13th, under the presidency of the Lord Mayor of London, it was announced that £2,613 had been received. In responding to the toast of "Success to the Hospital," proposed by the Lord Mayor, Viscount Ridley, the Chairman of the hospital, appealed to the generous public for help in reducing the outstanding mortgage of £85,000, interest and sinking fund charges upon which are a severe handicap to the committee.

SIR HECTOR CLARE CAMERON, on behalf of the committee of subscribers to the fund in memory of the late Dr. James Finlayson, of Glasgow, has presented a deed of gift to the Council of the Faculty of Physicians and Surgeons of Glasgow, conveying to the council the future management of the fund. The income from the fund is to be held and applied as the endowment of a Lectureship to be called "The Finlayson Memorial Lectureship." The first lecture under the management of the original committee was given in February, 1908, by Dr. Norman Moore, of London, who lectured on "The Schola Salernitana; its history and the date of its introduction into the British Isles."

THE villagers of Lipka, in the Schlesselburg district of Russia, have assaulted the disinfecting staff in a cholera-infected cottage, and destroyed their apparatus. A force of police has been sent to the scene of the disturbance. Some days ago the peasants in the Tsarskoe Selo district demolished the cholera hospital. The number of cholera cases in St. Petersburg alone is now between 700 and 800.

# A CLINICAL LECTURE

## ON

### INFANTILE SCURVY. (a)

By T. D. LISTER, M.D.Lond., F.R.C.S.Eng.,

Physician to Out-Patients, Royal Waterloo Hospital for Children, and Physician to the Mount Vernon Hospital for Consumption and Diseases of the Chest.

THE growing practice in the retail milk trade of regularly pasteurising all milk before it is delivered to the consumer has suggested to me the desirability of recapitulating some of the clinical points in the ætiology and diagnosis, and in the preventive and curative treatment of infantile scurvy. I do not propose to describe the morbid anatomy.

I need scarcely remind you that this disease is known everywhere on the Continent of Europe as "Barlow's disease." The first clear description of the condition was given by Sir Thomas Barlow in 1883. The disease had not been previously differentiated, although the credit of first describing it must be given to Møller, of Königsberg, in 1859, who described the cases under the name of "acute rickets." The first recognition of the real nature of the malady was in 1873 by Jalland, in London, and Ingersley, in Denmark. Their description was confirmed in 1879 by Cheadle, who regarded the cases as scurvy occurring in the course of rickets, his classical paper leading to the wide use of the term, "scurvy rickets." Sir Thomas Barlow adopted the view that the condition was one of scurvy, but showed that rickets was an independent condition, and might, or might not, be present with the essential changes which constitute the disease.

It occurs especially in the months of first dentition. As Dr. Still has pointed out, from an analysis of sixty-four cases under his own observation—a very exceptional experience—nearly 80 per cent. of the cases occur between the ages of six and ten months. Age is, therefore, an important point in the diagnosis.

The disease, as it presents itself clinically, is chiefly characterised by tenderness of the limbs, with swellings upon the shafts of the long bones.

Such a condition occurring in a child in the second six months of life should lead at once to an investigation into its diet. As Dr. Cheadle has suggested, limb tenderness alone sometimes justifies the diagnosis in children of this age.

Symptoms of secondary importance are such as occur in scurvy generally, and are very variable. They are hæmorrhage from, or purple discoloration of, the gums, cutaneous hæmorrhage, purpura and petechiæ, and bleeding from the nose, stomach, bowels or kidneys. Such bleedings occur in less than half the cases.

The remaining symptoms are fever, usually of moderate degree, and not always present, but, as a rule, associated with the degree of subperiosteal hæmorrhage existing, and certain special conditions dependent also upon these hæmorrhages, such as, for instance, exophthalmos, from orbital subperiosteal bleeding, this exophthalmos being of sudden onset, usually unilateral, and sometimes developing during a fit of crying; depression of the sternum as though driven backward *en bloc* (as described by Sir T. Barlow), due to separation of the costo-chondral joint; or soft crepitus from separation at or near an epiphysial line.

The child is usually flabby, always more or less

anæmic, is not necessarily wasted, and evidence of rickets is often entirely wanting, though most cases present it, as might be expected, the disease being one of faulty nutrition.

The lower limbs are much more frequently involved than the arms, nearly ten times as often, and it is quite uncommon for the arms to be affected alone, the appearance of swelling in the legs generally preceding that in the arms.

Here is a brief history of a case that has recently come before me. I give it to you from the medical attendant's own notes, which he kindly furnished to me:—

*Case 1.*—On February 9th, this year, a baby boy, æt. 9 months, was brought to see a doctor in a north-east suburb. The father stated that he feared he had injured the child's left leg in lifting him out of the perambulator, because the child cried whenever the leg was moved, and did not move it voluntarily. On examination, the doctor could find no evidence of injury, but the left leg was painful either on active or passive movement. A week later the right leg became affected. During the next fortnight the child got gradually worse, the pain increasing so that the slightest movement caused intense suffering, the other parts of the lower limbs becoming involved, so that he lost all voluntary movement, and screamed if raised in such a position that the legs hung down. At this time the doctor found that the legs below the knees were swollen. The temperature was found to be 100° F. on two occasions. There was sweating about the head and shoulders. The child seemed to waste, and the motions were found to be green and foul-smelling. There was no vomiting. The diagnosis made was epiphysitis, and a doubt was raised as to the possibility of there being spinal meningitis. A neighbouring practitioner who saw the child during the absence of the doctor in attendance, suggested also acute rheumatism. The child was sent to me on March 12th. He was an intelligent bright baby, fairly well nourished. The slightest touch to the limbs caused intense suffering. The right leg was held semi-flexed, somewhat everted, the left extended and apparently powerless. The calf of each leg was swollen, almost cylindrically.

The swelling was most marked towards the epiphysial lines. The gums were normal, with no signs of teeth appearing. There had been a streak or two of blood in the motions when the child was constipated, but nothing suggesting a hæmorrhage.

The child had been fed strictly on Allenbury's foods since birth, No. 1 from birth till three months old, then No. 2 till seven months old, and No. 3 from then to the date of being seen. In addition, a little Virol had been given from time to time during the last month or two. No anti-scorbutic precautions had been taken.

The child rapidly improved, and began to move his feet in four days, after being placed on an appropriate diet.

As the measures adopted in this case were fairly

(a) Delivered at the Polyclinic, Charles Street, London, W.C., on Tuesday, June 22nd, 1909.

typical, I will presently, when we come to talk about treatment, quote from the letter I sent to the medical attendant.

Here is a somewhat similar case from the Waterloo Hospital :—

*Case 2.*—A boy (C. M.), æt. 1 year, was admitted under Dr. Haig on November 12th, 1901, for loss of use of the legs and swelling of the right leg. The child had lost the use of its legs for five weeks. The right thigh had been swollen and tender for one month. The child had bled slightly from the gums, and there was occasional sweating from the head and chest. On admission the weight was 14 lbs.

The child had well-marked rickets and was poorly nourished. On the outer side of the right thigh was a very tender swelling, near the great trochanter. Temperature was from 100° to 102°. The condition rapidly improved under appropriate diet, and on December 2nd the child was well.

In this case the diet before the illness developed had been sterilised milk, and barley water, and Robb's biscuits.

Here you will notice that there was definite rickets, and slightly hæmorrhagic scurvy.

*Case 3.*—A slightly different case is that of a girl baby (W. S.), æt. 9 months, admitted to the Waterloo Hospital, under Dr. Rankin, on September 17th, 1906, with swelling of the left foot. The foot began to swell on September 14th, and the child was in pain. A petechial rash appeared on September 16th. The temperature was normal. There were no other signs of scurvy. The patient was well in a week.

In this case the diet had been Nestlé's milk and barley water, after the third month, when the mother had found herself no longer able to nurse the child. In this case the only bleeding was subcutaneous, and there was no rickets.

*Case 4.*—Also from Waterloo Hospital, is that of a boy baby (V. R.), æt. 9 months, admitted also under Dr. Rankin on April 4th, 1906. Swelling and tenderness of the legs had appeared about fourteen days before admission. The child was pale and flabby, but fairly well nourished. There was no sponginess of gums and the motions were natural. There were no signs of rickets, although the teeth had not appeared. There were no ecchymoses nor petechiæ anywhere. The legs were extremely tender and swollen from the knees to the ankles, and the back of each foot was shining and cedematous. Any movement caused the child to cry. The next day the child was lying still with the legs extended; there was great tenderness when touched. On the 11th, a week after admission, the child began to move the legs himself, lying with them flexed, and there was no tenderness. The swelling was going down. Five days later, on April 14th, there was some staining on the right tibia and dorsum of the foot from blood absorption. On April 29th the patient was well, and cut his first tooth.

In this case the diet had been breast milk for one month only, and afterwards Nestlé's milk for one week, when, diarrhoea and vomiting occurring, peptonised milk was given, then cow's milk and barley water; then, at four months old, Nestlé's milk and Virol, and at six months old, the Battersea municipal milk until admission. In this case also there was no rickets.

#### DIAGNOSIS.

In the diagnosis of infantile scurvy the following conditions should be differentiated :—

1. Syphilitic epiphysitis; this usually occurs in the second or third month—much earlier than scurvy. Scurvy takes months to develop.

2. The pseudo-paralysis, due to pain, has been thought to be due to spinal meningitis.

3. Traumatism. I have seen a child placed in splints for infantile scurvy.

4. Sarcoma.

5. Osteo-myelitis.

6. Acute rheumatism. "A mistake which ought never to occur, for rheumatism is practically an unknown disease under the age of eighteen months." (Still.)

7. Simple stomatitis. (In scurvy it is the gums of erupting teeth that show changes. Stomatitis is present also on cheeks and tongue.)

The chief points on which the diagnosis depends are :—

1. Tenderness of the limbs. Always bear the disease in mind.

2. Age. Never in the earliest months. Earliest case was at five months. (Still.)

3. History of diet for some months. Scurvy takes time to develop.

4. History of development of the lesions.

5. Nature of the swellings on the shafts of the bones.

6. Purple discoloration or bleeding from the gums of teeth which are at or approaching eruption.

7. Effect of anti-scorbutic diet.

#### ÆTIOLOGY.

What is the origin of these cases? All are agreed that it lies in the diet, but a difference of opinion exists as to the exact nature of the fault. Two views exist, which we may call (1) positive, and (2) negative.

The positive view is that the cause is an error in diet which leads to the development of scurvy by something deleterious being given. This opinion is upheld by the fact that cases have been recorded (Holt) where recovery has occurred on stopping certain patent foods, though still giving sterilised milk, and by the absence of scurvy amongst children fed by the sterilised milk charities in France. Certainly patent foods are often elements in the history of these cases.

The negative view is that the error in diet consists in withholding something beneficial, the not giving of a mysterious anti-scorbutic principle; this view may also be called the scorbutic theory. Its chief support is to be derived from the fact that the great majority of cases of infantile scurvy show an almost immediate improvement, and a rapid recovery under an anti-scorbutic diet of fresh organic food, including milk.

That infantile scurvy is a disease of civilisation is the broad view that emerges from this controversy as to its actual pathogeny. It occurs most frequently in the children of those who, though insufficiently informed, yet devote great care and attention to the feeding of their children. It is less common among the children of the very poor, who, though often hungry, perhaps receive a sufficient variety of experimental foods to enable them to avoid scurvy, though often acquiring enteritis in the process. Normal breast-feeding is more common also among the poorer classes. The breast in modern town-dwelling women, of all except the poorest classes, seems to be regarded much more as a mere æsthetic attribute of their sex than as one of the important organs of reproduction of the species.

Infantile scurvy is not a very common disease in children's hospitals. In three years at the Shadwell Hospital only one case was admitted as such. In fifteen years at the Waterloo Hospital only three cases were admitted as such, though, of course, cases occur occasionally in the out-patient departments. Rickets and gastro-intestinal affections



are, however, very common. It is this fact—namely, that only some children develop scurvy—that has led to the idea that they possess an idiosyncrasy. If we adopt the view that, by giving sterilised milk (with that is included pasteurised milk as a minor evil), we run the risk of causing infantile scurvy; then the present practice of heating milk before sending it out is likely to increase the liability of hand-fed infants to the disease if the fact is not recognised by the medical profession.

The whole practice of the habitual sterilisation of foods presents one of the most interesting problems of the day. It is becoming always more impossible to feed a great city with an adequate daily supply of pure fresh food. Many foods are sterilised and reach the consumer in hermetically-sealed packages. If not sterilised, the public health authorities tell us that a large proportion of the foods contain dangerous organisms, particularly so in the case of milk. The development of better methods of cold-storage, on the other hand, is an offset against the practice of sterilisation, so that, if we can regard food frozen for several weeks or months as fresh, we may presume that some of the difficulty is being overcome. Cold-storage does not destroy infection, and is not, therefore, applicable to the milk supply however.

#### PREVENTION.

In regard to the prevention of infantile scurvy, the growing use of the pasteurising machine by the first-class firms presents a new question for the parent and medical attendant in all cases of hand-feeding, always supposing that sterilisation is in itself a cause of scurvy. This is a matter of opinion. Certainly, I know many infants brought up on sterilised milk who have escaped scurvy, and any symptoms approaching it. Incidentally, I believe them also to have escaped the even greater dangers of impure milk. It is impossible in the commercial handling of milk, at a price that the public will pay, for it to be produced, carried, and sold under ideal conditions. To my mind, the counsels of perfection advocated by certain hygienists are incapable of adoption, though all must welcome greater supervision of the milk trade, such as is foreshadowed in the recently-proposed Bill of the Local Government Board.

The practical question for the medical attendant is one which has so often been discussed in medical journals: "Should milk be boiled?" The milk purveyor is answering it by taking the decision out of the doctor's hands. It is safe to assume that the bulk of the milk supplied by some of the best modern dairy companies is pasteurised for about twenty minutes at 160° F. before being sent out.

Amongst careful parents, led by specious advertisements to make use of proprietary preparations, the milk is nearly always completely cooked again in the course of making the food, and the baby will get absolutely no fresh food for months.

Under such conditions there is always a risk of the development of scurvy. This risk is certainly increased if the food given is entirely self-contained, that is, if no milk is to be added to it in preparation.

It must be admitted, in this connection, that some of the infants' patent foods possessing the best reputation are of this class. Here, again, I can say that I have seen many infants brought up entirely on these foods without the slightest evidence of marked malnutrition, such as anæmia, rickets, limb-tenderness, or scurvy. Almost all hand-fed infants have somewhat delayed dentition, so that I do not include this as evidence of disease.

As regards prevention of scurvy in children fed

on cow's milk, there are only two things the doctor can do. Either he must insist upon the use of fresh milk obtained from a reliable source, or he must use precautions by making regular additions of fresh organic food to the dietary when he knows the milk is cooked.

The first of these is by far the best, but I think extremely difficult. I need not dwell on the fallacy of so-called "nursery milk." As a material for infant-feeding, ordinary standard milk is certainly preferable, "nursery milk" being dear and usually much too rich in fat, being entirely a fancy article supplied by the milkman according to his own ideas of what is desirable. The difficulty of investigating standard milk is enormous. Milk comes to London an average distance of about two hundred miles, and is measured, mixed and poured from one vessel to another so many times before reaching the retailer that it is almost impossible to trace its source or secure its freedom from infection with certainty. Some of these faults will be remedied if the new Bill becomes law. Meanwhile, one can only say, it is best to secure good fresh milk for infant-feeding, if one can.

The second measure of prevention is, on the other hand, simple. Various substances are given, such as orange juice, grape juice, diluted lemon juice, or raw-meat juice, and the youngest children will take them greedily. This should, I think, be a routine practice where cooked milk must be used.

In this connection, I would like to repeat an observation I have often made in speaking on infant-feeding. About the time of the first dentition, we know that other important changes in the digestive apparatus are also taking place. The pancreas, for instance, begins to assume its amylolytic function. I am convinced that it is necessary to supplement the milk in many hand-fed children by the addition of one or the other of the farinaceous foods about the seventh or eighth month, so as to employ the newly-acquired activity, otherwise nutrition is likely to "hang fire."

#### CURATIVE TREATMENT.

As regards curative treatment, the following lines may be followed, which I quote from a recent letter to a practitioner:—

1. Stop preserved foods of all kinds.
2. Give two teaspoonsful of finely "creamed" mashed potatoes in the bottle twice a day.
3. Give the juice of six grapes, or a little lemon juice diluted with water, about three teaspoonsful of juice daily between meals.
4. Add at least 25 per cent. of reliable raw fresh milk, if obtainable, to each bottle.
5. Keep the child at rest when the limbs are painful, avoid dressing or undressing, and let the baby be handled only on a firm pillow or small mattress.

6. Treat the gums, if necessary, as for stomatitis. These were the lines followed in Case No. 1 that I described to you, and the progress made was of the ordinary kind in a case that recovers.

Twenty-four hours after starting the new diet the pain was less, the baby slept longer, and did not cry so much when moved.

Three days after, the foot was moved, and the legs could be handled gently, and he was in every way brighter and happier. In five days both legs were moved, and subsequent recovery was uneventful.

The danger of infantile scurvy lies wholly in the case being overlooked. There is no disease which will afford greater satisfaction to the medical attendant who recognises and treats it in the early stages. In very severe cases, when there are many hæmorrhages and the child is badly nourished or bronchitic, recovery may not occur.

It is a disease to look out for and to prevent. It is a rare disease. It is a very rare disease as a fatal affection. It is a comparatively modern disease, one of the penalties of civilisation, perhaps, and it is one which, since its real nature was described by Sir Thomas Barlow, should quickly become a mere historic fact. Babies must have milk in preference to patent foods. They must have fresh organic food. If their milk is cooked before delivery, or always cooked, as a measure of precaution, or in its preparation, or if pure dried milk is used as a diet, simple fruit juices or raw-meat juice must supplement it. In the present state of the dairy-farm industry in this country, and the condition of the milk traffic, I think properly pasteurised milk, heated and cooled again as soon as possible after arrival in London, is the best and safest, and I would infinitely prefer trying to prevent, or even to cure, infantile scurvy, to treating the more severe affections due to infection of the child's digestive organs by septic, typhoid, or tuberculous "fresh" milk. But I do not for one moment want you to think that foul milk is to be encouraged, provided it is sterilised. Cooked dirt is not much more attractive to me than raw. Some of the so-called sterilised milk supplied by badly-equipped small dairy firms is frankly poisonous, being sterilised, as an economical measure, when half decomposed, and not as a matter of hygienic precaution.

Note:—I wish to thank Dr Fowler, of the resident staff of the Royal Waterloo Hospital, for examining the notes and supplying the abstracts of cases, and Dr. Haig and Dr. Rankin for permission to quote them.—T. D. L.

NOTE.—A Clinical Lecture by a well-known teacher appears in each number of this journal. The lecture for next week will be by Professor Antonin Poncet, M.D., Professor of Clinical Surgery at the Faculty of Lyons, and M. Leriche, M.D., Surgical Registrar at the Lyons Faculty of Medicine. Subject: "A Study of Acute Tuberculous Rheumatism."

## ORIGINAL PAPERS.

### SYMPHYSIOTOMY AND HEBOSTEOTOMY.

By R. ERNST RUNGE, M.D.,

Assistant Physician an der Frauenklinik der Königlichen Charité.

[SPECIALLY REPORTED FOR THIS JOURNAL.]

THE most important question for the practical obstetrician is how the obstruction caused by contracted pelvis may be avoided or removed. Up to quite recently the only outlets were induced labour, Cæsarean section, and perforation. The operative era of the last few years has made a great change in this respect. There are two operations which already, but still more in the future, justify one's hopes in this direction: symphysiotomy and, above all, pubotomy, or, as the procedure has been recently named, hebosteotomy.

Both operations pursue the aim of cutting through the rigid pelvic girdle and thereby enlarging its area. The consequence of this is that the head of the child that could not pass through the narrow opening passes the enlarged one with more or less facility.

Symphysiotomy, first proposed by Sigault, and taken up in Germany, above all, by Zweifel, consists in dividing the structures above the symphysis, and then dividing this. A gaping of the pelvic outlet is the result. As the wound in the soft parts in this procedure is rather large, Zweifel more recently tried to operate subcutaneously. Whether

in this symphysiotomy—i.e., whether separation of the cartilage of the symphysis was ever effected is doubtful. It is very easy for the saw, when introduced subcutaneously, to glide off the cartilage, and in reality divide the adjacent bone—i.e., instead of a symphysiotomy, perform a hebosteotomy. Symphysiotomy may find a place in flat, contracted pelvis, when the true conjugate is narrowed to 6.75 cm. In general contracted pelvis the limits for the operation are almost 1 cm. higher. In the opinion of Zweifel and other authors, the operation is contra-indicated in women with a febrile temperature.

Now, how is re-convalescence affected by this operation? In general, the wound heals well; that made by the saw closes with a firm cicatrix of connective tissue, so that the women are able to perform any kind of labour. It is possible, however, that a collection of secretion may set up some trouble behind the symphysis. By the open symphysiotomy this may be avoided by drainage of the prævesical space, but not with the subcutaneous operation. The period when the function of walking becomes normal depends on the healing of the wound by first intention; it usually averages about two and a half months. So far, however, unfortunately, this measure of success is not obtained in half of the cases.

And now how does the operation stand with regard to later pregnancies? Permanent widening of the pelvic ring could not be determined by Abel. On the other hand, Ihl and Theiss affirm that more than 50 per cent. of the subsequent labours are spontaneous. Other authors, such as Baisch, for instance, are of opinion that this result is frequently only obtained when a movable joint is left at the point of division. Some authors, as Meissner, Velitz and Gradenwitz, saw narrowing of the pelvic canal through the formation of callus in the cicatrix.

Let us now briefly look at the statistics. Zweifel lost 6 per cent. of his cases; according to the calculations of Meyer, the total mortality of the published cases was from 11 per cent. to 12 per cent. Neugebauer reckoned the infant mortality at 20 per cent.

A great disadvantage of symphysiotomy is that it cannot be carried out by the general practitioner, but must be reserved for hospital treatment.

That it is not a simple operation is shown by the fact that in the hands of even so skilful an operator as Zweifel, who has practised it for years, no generally satisfactory *technique* has been discovered.

Let us now turn to hebosteotomy. It is an operation of much later date than symphysiotomy, but, in spite of this, it has already found more followers than its rival. With intent, it was first performed by Gigli by means of a specially-constructed wire saw. Baumm was the first to undertake the operation in Germany, unhappily, with an unfortunate result. It would probably not have met with any further acceptance if Doederlein had not adopted it.

As regards *technique*, we must distinguish two modifications, the open and the subcutaneous operation. The first was first recommended by Gigli, and was further practised by Van de Velde and Meyer. By a transverse section through the soft parts the os pubis was exposed; Gigli's wire saw was then introduced under guidance of the finger and the bone severed.

Doederlein followed another plan with the subcutaneous method devised by himself. He makes a transverse incision over the tuberculum pubis down to the bone, and then with his finger pushes

back the tissues behind the pubes. He now passes a curved needle round the bone and brings it out near the labium majus. Other authors recommend a similar procedure. Walcher, Kanne-giesser and Bumm went a step further in carrying out the operation entirely subcutaneously. According to the description of Stoeckel, Bumm proceeds in the following manner:—A peculiar-shaped curved needle is introduced two finger breadths wide of the clitoris, between the large and the small labium, and just below the descending ramus of the pubes. The index finger of the other hand controls the point of the needle from the vagina. After the exit of the needle above the os pubis in the region of the pubic hair, Bumm's modification of the saw is hooked into an opening in the needle and withdrawn with the saw, and then with a few strokes the bone is divided. Reifferscheid and others proceed in a like manner, only they make the puncture from above.

If we compare the two methods with one another, a more exact arrest of hæmorrhage is perhaps attained by the first, but it is more complicated, and the wound is more likely to become infected. Up to a certain point the same may be said of Doederlein's method. On the other hand, the entirely subcutaneous operation is quite simple; it may be performed by the expert hand in private practice, and is as good as an absolute guard against infection.

As regards treatment of the wound, it must necessarily be more intensive in the open method. With the subcutaneous operation, a pledget of collodion or a light bandage is sufficient. Special stress must, however, be laid on the avoidance of hæmatoma in the suture canals. A firm compression bandage outwardly and a vaginal tampon protect against this. As regards after-treatment, absolute rest for the pelvis was at first considered necessary. Later, however, less importance was attached to this, owing to the notion that through a certain movability of the sawn ends of the bone a less rigid cicatrix would be obtained, which would allow permanent widening of the pelvic canal. For the first twelve hours, at least, the firm compression bandage must never be omitted, in order to make certain that no hæmatoma can form.

There has been a great dispute amongst authors as to the manner in which healing of the bone takes place. Some consider that the ends of the bones ossify; others that the union is only by means of connective tissue. During the earlier weeks the union is certainly only by connective tissue; later, most authors believe in a bony union. The most advantageous condition as regarded the future would naturally be firm union by connective tissue, as then dilatation of the pelvis for later labours might be expected with greater probability.

One disadvantage of hebosteotomy, even at the present time, is the occurrence of undesirable wounds. Considerable lacerations of the vagina have been observed rather frequently. A part of these is certainly due to rubbing through of the soft tissues by the sharp ends of the bones as the foetal head passes through the pelvis, and must be laid to the charge of the operation. Another part is due to unyieldingness of the soft parts, and these would probably have occurred even without any operation. These injuries may to some extent be avoided by not allowing the bones to gape too widely as the head of the child is passing through the pelvic canal. It is the same, but in a higher degree, as regards injuries of the bladder. These may to a certain extent be caused by the hebos-

teotomy needle, but they heal up, as Stoeckel not unjustly remarks, almost spontaneously if a catheter is left in the bladder.

In the early days people feared large losses of blood from the injured blood-vessels, especially from the bulbus cavernosus. Rosthorn had a death from this. No further unfavourable observations on this point have since been made; any bleedings that do arise are easily overcome.

A further danger of hebosteotomy, infection of the wound, is best avoided, as already mentioned, by the entirely subcutaneous operation. With a proper *technique* the wound can be as good as absolutely protected from contact with vaginal secretions, and any infection by the subcutaneous operation is, from the small size of the wound, extremely improbable.

As regards the gain in space in the pelvis after hebosteotomy, it is beyond the limits of this paper to go into the different increases of measurements of the individual cases. It depends essentially on the kind of contraction. The space at the point of division permits on an average the laying in of two to three fingers. Almost equally important is the question already mentioned, whether permanent dilatation may take place after hebosteotomy. Most authors appear to answer this question in the affirmative. Here the manner of healing of the ends of the bones is naturally of importance. If a broad callus forms between them, or only connective tissue, permanent dilatation may be looked for. If the bones unite, however, with only a small callus, no great gain need be expected.

The indications for the performance of hebosteotomy are the same as for symphysiotomy. It can never be a substitute for Cæsarean section when this is absolutely indicated. It is improper to undertake the operation when the labour seems likely to be difficult, or even impossible. It is always proper to wait to see what the uterine pains can effect. An operation will then frequently be unnecessary. It is only after careful observation of the course of the labour has shown that a less dangerous method of delivery is out of the question, and that, on the other hand, something must be done to accelerate the course of labour, that the operation becomes justifiable. It should never be undertaken, except there is a certainty that the child is alive and strong; it would be a mockery if the result was a dead child.

The standpoint that Bumm takes is, shortly, the following:—In first labours he avoids hebosteotomy wherever possible, on account of the possible great injury to the soft parts, and in place of it substitutes suprapubic Cæsarean section. In the case of multipara, he performs hebosteotomy with a true conjugate of 6.75 cm., which diameter he looks on as the lowest limit. Otherwise he does not limit himself strictly to figures in contracted pelvis, but places much more importance on want of proportion between the size of the child's head and the space in the pelvis. Thus, even in a case of normal pelvis, if the head of the child was of giant size, and there was want of proportion between the head of the child and the pelvis, he would perform hebosteotomy. Hebosteotomy is indicated in contracted pelvis, when, notwithstanding strong pains, the head of the child does not enter, when the waters escape too early, with consecutive absence of power on the part of the uterus, when the foetal head is fixed in an unfavourable position above the brim, or when there is an excessive degree of infantilism in the genital organs, associated with defective pains. Bumm does not leave the social position of the patient without consideration. If the patient has an excessive desire

The hospital is small and poorly equipped, being only intended for local needs. It falls so far short of the standard we are accustomed to in Europe as to be hardly conceivable by a European surgeon. The buildings he might think were those of a farm. The staff he would find to consist of Major Smith himself, assisted by the following natives: an assistant surgeon, a hospital assistant, and a few dressers. The staff, in fact, is not as large as that of one ward of the Edinburgh Royal Infirmary, whilst the number of patients at one time under treatment in the hospital for major operations on the eye is frequently as large as 450.

These facts are important because they indicate that the immediate results of the operation must be good. Were many of the patients to require attention daily, or even as seldom as twice a week, the organisation would break down and the "staff" would be paralysed by overwork. As a matter of fact, the cataract cases are operated upon as soon as they come to hospital in the morning. There is no preliminary treatment. There are two tables in the operating-room, and while one patient is being operated on another is being bandaged up and carried away. The great majority of them are not dressed again till the eighth day, and receive their discharge on that day. Thus there is a minimum of dressing.

The assistant surgeon, on his daily rounds, finds out any case suffering from indications of post-operative complication, and attends to him. The dieting is simple food of the people, sold to the patients and the friends who look after them by a man from the bazaar. The very poor get a ticket entitling them to get food at the hospital expense. Only about 3 per cent. get free diet. All the nursing is done by the friends of the patient. The fact, then, that under such conditions these same patients and their friends, having left the hospital, are so satisfied with the result that they in their turn send their friends to the same place in such astonishing numbers, shows, to my mind, that the operation is emphatically a good one, and that its after-results are better than those hitherto attained by any other operator in the Punjab. And when I say any other operator in the Punjab, I might just as well say any other operator in the world, for I do not think that operators on cataract are anywhere else more experienced.

In view of these facts, any *a priori* reasoning designed to show that the after-results of the operation must be bad may be disregarded; and that gloomy prognostications are, moreover, disproved by the excellent after-results which have been noted by myself and others in patients operated on by Major Smith from one to six years previously. The usual appearance is that of a clear black pupil and a brilliant eye; and vision with correcting glasses is usually 6/6.

Major Smith's fame amongst these poor and ignorant people extends a long way. At his hospital I have seen Afghans from Cabul, men from the sea-coast of Karachi, from the wilds of the Himalayas, the desert plains of Sind, and the more fertile regions of the Ganges. And this fame has all been attained by a knowledge of how to use a couple of blunt hooks in the extraction of cataract.

Again, it is interesting to note that there is no selection of cases. Indeed, a European surgeon might well be appalled by the unfavourable condition of many of the eyes operated upon. And there is no doubt, did circumstances permit, that many of the cases would receive preliminary treatment if it could be given to them. But for several reasons in Major Smith's practice, such treatment cannot be given.

Eyes which offer any hope of vision are operated on, having regard to the principle that some vision is better than none at all. The following classes of eyes are operated upon:—Eyes with old trachoma and blepharitis; glaucomatous eyes; eyes whose lenses have been couched and have a consequent atrophy of the retina and night blindness; eyes with iris adherent to the lens; and eyes in every stage of cataractous degeneration from the first hazy beginnings to complete atrophy. If both eyes are cataractous, both are done at the same sitting. Combining these unfavourable conditions with the great popularity of the operation, there follows but one conclusion, and that is, that in Major Smith's hands it is an eminently sound one and the operation of choice.

If we grant this, it comes to be a question whether it is Major Smith, and he alone, who can do the operation. The operation would not be of much use to the progress of the surgical art if only one man could do it. And I may here state without preamble that there is no jugglery about it. It would be hopeless for the ordinary man to attempt to imitate a Leoncavallo. None may aspire to play billiards like Roberts, to sing like a Caruso or a De Retzke, to play the violin like Paganini, or to walk the tight-rope with the assurance of Blondin. But Major Smith's performance is comparable with none of these. It does not require a special genius. What Major Smith can do others may do also, provided they are properly taught and can get a sufficient amount of practice. The ordinary man cannot hope to quite attain Major Smith's skill, because he will not be able to get so much practice or experience as Major Smith has had. But with an experience of about two hundred operations, he will attain sufficient skill for practical purposes. A beginner must have good manual dexterity, as anyone professing to be an ophthalmic surgeon should have; and he should be taught how to do the operation in actual practice by one who can do it well himself.

I am speaking from personal experience, because I have been taught to do the operation by Major Smith himself, who has kindly allowed me to do over 500 operations under his personal supervision, and who has taught me every detail to be learned in the manipulation of the various kinds of eyes. I have attended Major Smith's clinique during the last three years. Prior to this I had occasionally attempted the operation, but with indifferent success, as I did not know how to do it. The first extraction in the capsule I ever saw done was done by myself, or, rather, by the patient. It was one of my early operations, and was intended to be done in the usual way with capsulotomy. When I had made the incision, probably none too skilfully, the patient, an old woman, powerfully screwed up her eye and delivered the lens neatly upon her cheek. There was no prolapse of iris nor escape of vitreous; the pupil was round and small and central and jet black. The wound healed rapidly and without any complication, and the result was what one might call ideal. Pleased with this first extraction in the capsule I endeavoured to repeat the performance. Sometimes I was successful, but rather oftener, I think, I made a hash of it. I either burst the capsule or I had to do a capsulotomy to avoid using what I considered to be unjustifiable force; or I lost vitreous and had to shut up the eye without inquiring too closely into the position of the iris.

When, three years ago, I first saw Major Smith operate, I realised that I had not known how to do the operation. I watched Major Smith operating for a long time, and studied his methods as

closely as I could. But when I went back to my own hospital and tried to do the operation, I found, somewhat to my disappointment and astonishment, that I was not much better at it than I was before. When I saw Major Smith doing it, it all seemed simple and easy. When I tried it myself all sorts of distressing things used to happen.

I used to watch lens after lens being extracted entire in its capsule, smooth and glistening, some mature and ripe, others only just beginning to be opaque, and a few the dense black cataracts; some with big and some with small nuclei, some hard and thin, others round and soft and fat. Out they came and into the bottle, lens after lens, without a hitch.

#### TECHNIQUE OF THE OPERATION.

Then Major Smith began to teach me by allowing me to operate myself under his direction. It is the only way to learn, and I shall always rest under a deep debt of gratitude to Major Smith for his kindness in teaching me, and for the pains he has taken to render me proficient.

The first thing of which I became aware was that it was much easier to operate in Smith's hospital than in my own. The reason was that the assistant knew exactly what to do. The first lesson, then, is that the assistant is almost as important as the operator. Next I found that there was something to learn at almost every stage of the operation. There were many little things which I had failed to notice, despite the large number of times I had seen the operation performed. These little things are important that they conduce to a smooth and even operation without complications and distractions, and hence lead to a good result. Major Smith's *technique* is such that it may be said to avoid all complications, and in this lies the secret of its success. The eye is quickly and gently dealt with, and it shows its gratitude by its good behaviour, both at the time of the operation and afterwards. I have now done over 500 extractions in the capsule as a pupil of Major Smith's. He has also taught three other surgeons. The two whom I know and myself can do the operation with ease and confidence, and with almost uniform success. Of the other operator, Knapp, of America, I cannot speak from personal knowledge. The operation, then, can be done by others besides Major Smith, and the failure of these ophthalmic surgeons who have tried to do the operation and have not met with success is due to their fault of *technique*, and not to the fault of the operation. There is a great deal to learn as to "how" to do the operation, and I can fully endorse Major Smith's claim that he has evolved the *technique* of the operation.

Such, then, is an account of Major Smith and his operation. I speak from personal observation and experience of Major Smith's practice at Jullunder during the last three years, and he has very kindly allowed me to do about 500 extractions in the capsule on his patients, and has thoroughly taught me how to do it. Having been put in the right way by a master, I have had a very gratifying success, and a relative immunity from disaster or complications. My own cases, unlike Major Smith's, have been more or less selected ones, as Major Smith himself has always done the cases where there was glaucoma or a previous dislocation of the lens.

I wish to absolutely endorse what Major Smith says as to the advantages of his operation, and I would lay it down that—except in patients under twenty-five years of age—it is the best operation for nearly all cataracts, and that it is the operation of election in immature cataract, and that the time of election for the performance of the operation of

cataract extraction is when the cataract is immature, because then the operation of extraction of cataract in the capsule is easiest to perform, and is then least likely to be fraught with complications, either immediate or remote.

The general acceptance of such a doctrine will mean a very great change in the present methods of treating cataract; and it will mark a very great advance.

## HEART TONICS AND VICHY WATER IN THE TREATMENT OF MORPHINISM.

By W. OSCAR JENNINGS, M.D.,

Of Paris.

FOR many years I have been using heart tonics and bicarbonate of soda in morphinism, not as a "cure," but as part of the treatment which remedies the physiological disturbances, caused by suppression, and which, by alleviating two of the principal factors of craving, reduces the otherwise intolerable wretchedness of an ordinary weaning to a perfectly bearable minimum.

The importance of these therapeutic measures was confirmed by the late Prof. Gamgee, who, following upon the same lines as myself, has insisted upon the necessity of the recognition of the "multiple causation of craving" of the "three modes of treatment," which are the same as mine, indicated by the three "great groups of symptoms."

In expressing this opinion Professor Gamgee has, it may be said, come to a conclusion that has long been adopted universally abroad, but he does not express the views of the majority of English writers, some of whom, justly looked upon by the profession as authorities, have declared that these same means of treatment are useless.

Sir Clifford Allbutt and Dr. Rolleston, for instance, state that they have tried them, "but we have not," they say, "found them useful."

Before discussing further this "physiological" part of the treatment of the morphia habit, it may be remarked that it is useless to attempt the cure by any means of a morphia patient with a wrong mentality—that is to say, of one who does not really *intend* to give up the addiction if he can be helped efficiently.

On the other hand, in morphinism, mentality is conditioned as much by sub-consciousness as consciousness, and the success of a morphia weaning will always turn upon physiological treatment, for when the somatic substratum is freed from the greater part of the discomfort arising from perverted function, the *hantise* previously caused by organic malaise will be relieved, and with it the unconquerable obsession.

It is by this means, associated with progressive voluntary renunciation, that I have within the last ten years been able to obtain 90 per cent. of successful results in the cases—nearly always apparently hopeless ones—which have been under my care. In one of the most recent morphia had been taken for a quarter of a century altogether, and continuously for the last twenty years.

On the other hand, many of my patients, almost invariably distinguished medical men, had previously been unsuccessful chiefly in consequence of the non-adoption of these means, having been nearly always discouraged from using them by the perusal of Sir Clifford Allbutt's monograph on "Morphinism." (a)

As, then, for every known morphia *habitué* ticketed as a "fiend" there are at least twice as many unsuspected users of the drug, both in the medical profession and outside—unsuspected because they know the futility of applying for ordinary medical advice, and who would yet gladly be free, the importance of rectifying so grave an error concerning such a widespread and generally hopeless condition is obvious.

#### 1.—HEART TONICS.

Sir Clifford Allbutt and Dr. Rolleston contest the indication for heart tonics in morphia suppression, and

(a) One case of the kind was quoted by me in my paper in the *Lancet*, August 10th, 1901.



deny the tonic action of sparteine on the heart entirely. They say that the first of the tracings given in my memoir, and here reproduced with the plateau I have described, taken at the time of craving, only shows increased tension—that the effect of sparteine, as of morphine, is to lower tension, as they say, is proved by the second and third sphygmograms. Huchard, on the contrary, is of opinion that the general condition in chronic morphinism is one of hypotension, and the clinical observation of morphia patients demonstrates that at the moment when the tracing with flattened apex is taken, the tension is at its minimum.

Instead of contraction of the arterioles and capillaries, as supposed by Sir C. Allbutt, there is, as a matter of fact, at this time vaso-paretic dilatation, as any clinical observer can recognise, with sluggish circulation, semi-stasis by vaso-motor asthenia—morphinopriva, corresponding to the weakness of cardiac impulse, due to deficient innervation of the heart from the same cause.

This paretic condition, due to want of an accustomed stimulant—to relative amorphinism—is instantly relieved by morphine, which, in *habitués*, at the moment of administration, is a transcendental tonic, or by sparteine, which then gives identically the same tracings as digitalis, a fact which tends to show that in morphia addicts, morphine and sparteine, as well as digitalis, are tonics of the heart. The flattened pulse of craving, which, under some circumstances—kidney disease, for example—would indicate high tension, has no such meaning in amorphinism.

At this moment it indicates, as far as the heart is concerned, diminished impulse, as in the absorption of a large part of the tidal wave by aortic aneurism. There is, then, hypotension in amorphinism, and restoration of systolic pressure and of tonicity, by morphine and sparteine, which can be easily determined by the sphygmomanometer, or by any of the simpler instruments for estimating tension.

Sphygmographic tracings do not always give positive evidence. They may require interpretation. The same tracings can be obtained in exactly the same conditions, but similar ones may be obtained under different circumstances when there are opposite and compensating conditions. (a)

But even supposing that the action of sparteine were not, as has been shown to be the case by Laborde, Pouchet, and other competent observers, that of a direct cardiac tonic under ordinary conditions, and that it were only a lowerer of tension, it is a mistake to suppose that drugs which lower tension cannot have a tonic effect on the heart. They may do so even in a patient who does not take morphia, when, by relieving the strain, and lessening the required effort, they will rest and strengthen the tired organ.

(a) Dr. Haig, it is true, in the *British Medical Journal* of 1889, and in his work upon "Uric Acid," gives tracings similar to the above, and states that they show low tension under the influence of morphia, which clears the blood of acid, and high tension during the "opium rebound." During the low tension, that is, under the influence of morphia, "the patient is happy and comfortable, and without sexual desire; during the rebound, when there is collemia, the reverse condition obtains, high tension, wretchedness, and sexual excitement."

As Sir Clifford Allbutt has most likely taken Dr. Haig as his authority, it may be pointed out that the tracings given by this author were obtained after the administration of morphia or opium in non-addicts, and that the action in such a case is exactly the opposite to what we observe in morphinism.

The high-tension tracing was obtained after "a dose of opium over-night." His other observations show the effect of two successive doses of 16 of a grain of tartarate of morphia (which is equal to about one-tenth of a grain of hydro-chlorate), or of small doses of opium, of morphia (on himself), "not continued for more than a day or two."

It is evident that Dr. Haig was entirely unaware that the action of morphia is quite different in addicts to what it is in non-addicts. In accordance with his theory, he finds that the clearance of the blood from acid by morphia causes low tension, well-being, and lessened or complete abeyance of sexual appetite.

But morphia and sparteine do not act in this way in morphinism. The condition of the arterioles and the capillaries in a morphia addict at the time of craving not being one of spasm or contraction, as Sir Clifford Allbutt thinks, but of ischæmic dilatation from slowing of chemico-vital action, the effect of the drugs mentioned can only be to restore tonicity and to replace passive congestion by active hyperæmia.

To show this, however, by the sphygmograph, the tracings must be taken at the right moment—that is, when the patient is sufficiently uncomfortable to require relief. Such was the case when the first of the three following sphygmograms was taken. The



FIG. 1.—Pulse of morphia craving.

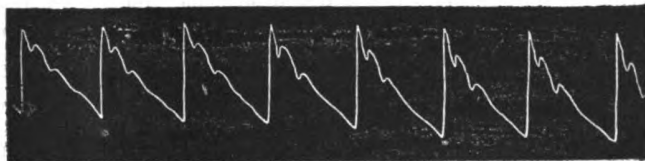


FIG. 2.—Pulse of morphia *habitué* restored by morphia.



FIG. 3.—Pulse of morphia *habitué* restored by sparteine.

second shows the effect of morphia, the third that of sparteine, under the same conditions, a tracing taken just before its administration having given precisely the same appearance as No. 1. (a)

Sparteine acts, then, in morphia suppression, like morphia, as a perfect and immediate heart tonic, and besides the evidence of physiologists and of my patients, who constantly affirm that sparteine enables them to walk up hills or to take active exercise which would otherwise have been impossible. (b) The universal experience of specialists is conclusive.

With the collemia of the "morphia rebound" high tension and general misery, and uncontrollable desire. But if this is true of addicts, and Dr. Haig quotes a case in point, mentioned by me in *L'Encéphale*, the exact reverse occurs in persons unaccustomed to opiates, and even for some time with small doses. Morphia, which in the non-addict lowers tension, ought, therefore, to clear the blood, but instead of being anaphrodisiac, it has entirely the opposite effect, as every morphia *habitué* knows.

In a former memoir I have discussed this matter more fully, and have shown that in the world of pleasure it is the fact of this increased vigour that leads so many recent converts to the syringe to become propagandists of their new cult. The presence, then, or the absence of acid in the blood, has not so much to do with sexual desire as Dr. Haig supposes, and this shows that he, and Sir Clifford Allbutt, experimenting after him no doubt in non-addicts, have confused the consequences of two totally opposite conditions.

(a) "The observations upon the sphygmographic tracing of the pulse of habitués, we believe," says Dr. Crothers, "have laid the physiological basis for a rational system of medication. Sparteine and Caffein," he adds, "are very effectual in many cases."

(b) The only cases in which I have found sparteine in ordinary doses (gr.  $\frac{1}{2}$ —gr.  $\frac{3}{4}$ ) *unsuitable*, have been those in which there was high tension from excessive use of tobacco, and it is in these precisely that it ought to be most useful, if sparteine were a lowerer of tension. In one patient, the tension as shown by the Riva-Rocci sphygmomanometer was above the normal. In this case cigars had been smoked all day long, and the ordinary dose of sparteine gave rise to intolerable headache. It may be remarked that sparteine in the usual dose is always badly borne by those who use tobacco in excess, and is in this way the touchstone of nicotine poisoning.

It is evident, then, that in condemning in their compilation a means of relief which constitutes, as Professor Gamgee recognises, one of the most formal indications of treatment, and in stating that sparteine only lowers tension, that it does not have a tonic action on the heart, and that it consequently is not useful in morphinism, Sir Clifford Allbutt and Dr. Rolleston have come to a most mischievous conclusion. It is evident, also, that the original results, now generally admitted, of Germain Sée, who says that it is dynamogenic; of Laborde, who calls it the "metronome of the heart"; and of Pouchet, that it is incontestably a heart tonic, accepted by most English pharmacologists (a), must be taken as the more accurate.

## 2.—BICARBONATE OF SODA: VICHY WATER.

In my last edition (1901) I called attention to the fact that this, in my opinion, most valuable symptomatic treatment of the gastric and general hyperacidity of suppression had been by Erlenmeyer improperly magnified into a method to which he had given the pretentious name of "chemical demorphinisation."

Sir Clifford Allbutt, who knew nothing of this, and who takes Erlenmeyer as an authority, quotes him as recommending a totally different treatment, which he had long before renounced. He had not thought it necessary to discuss in his "Practice of Medicine" the method by bicarbonate of soda, "as he had," he said, "looked upon it only as a fad."

As a complete method of treatment there is no doubt that it is, to say the least, an exaggeration, a hasty generalisation, but the testimony of specialists to its symptomatic value is unanimous and so conclusive, and it is surprising to find that in his last edition Sir Clifford Allbutt still remains ignorant of the facts of the case, and still continues to deny the value of Vichy water.

To the evidence I brought forward in my last edition it would be easy to add other authorities sufficient to make a small volume, but, before bringing forward this kind of proof of its value, it will be interesting to explain its mode of action in morphinism, and show, as in the case of sparteine, that it could not fail to be useful.

The morphia habit is a toxic neurasthenia, a disease of over-stimulation, and outside the special indications for cardiac tonics, for a flagging heart deprived of its accustomed stimulation, nearly all of the other somatic symptoms may be looked upon as *nervo-katabolic*. They react upon one another as the *ensemble* of the somatic disturbances of function react upon psychism.

The result of over-stimulation is to produce metabolic perversion and to cause fatigue, and the fatigue of the nervous centres in its turn causes katabolic insufficiency, the formation of acids, which keep up a condition of nervous exhaustion by chemical changes of the cells. I first suggested this as a factor of morphia craving in 1887. Two years afterwards Dr. Haig found excess of acid in morphinism, and it is now admitted that fatigue, whether physical or mental, gives rise to the formation of acids, and that stimulation consists of abnormal elicitation of energy, leaving afterwards reactive depression and (with morphia addicts) exhaustion. In ordinary healthy tiredness the acids (phosphoric, lactic, carbonic) are soon eliminated, but when fatigue becomes more or less permanent, as in the toxic-asthenia of morphinism, the nuclei of the neurones, which in their normal condition are alkaline, become acid, and this can be shown histologically. The same thing is true of the muscles of the organism generally. Whenever a tired organ is examined histo-chemically the acid reaction will be found.

As I am confining myself to the question of acidity, I will say nothing of the other products of metabolic perversion, which may all help to cause fatigue. But, as in other cases of slowed nutrition, diabetes, for example, there are many intermediary products of imperfect combustion which can be found in the urine, the more perfect oxidation of which, together with the relief of the discomfort caused by them, can be promoted by bicarbonate of soda.

I have alluded to the abundance of documentary evidence on this subject, and if I insist somewhat

strongly upon this point, it is because, although Vichy water is not *per se* a "cure" for morphinism, each factor of treatment conditioning the efficacy of the *ensemble* of the measures employed, its administration will make all the difference in the comfort during weaning, and its omission may turn the scale to failure instead of to success.

In a paper read at the Paris Société de Thérapeutique, in 1906, on "The Treatment of Chronic Intoxication by Morphia and Opium, and the 'Vichy Cure,'" by Dr. Lebeaupin, the author, a specialist at Vichy, stated that he had frequently tried my plan of treatment, "et nous n'avons jamais eu qu'à nous louer," he adds, "des résultats obtenus."

"The use of Vichy water," he says, "taken at the spring, is the best remedy for general hyperacidity resulting from the state of craving which accompanies weaning. In all patients intoxicated by opium or morphine, abstinence gives rise to hyperacidity of the stomach, weakening of the heart, and nervous irritability."

"Hyperacidity of the stomach is a fact which has been recognised for some time, and to combat this acidity the use of alkalines is obviously indicated, and particularly bi-carbonate of soda."

"Erlenmeyer," he says, moreover, "has appropriated this idea, and describes under the name of 'chemical demorphinisation' a treatment which is in reality a part of the method of another author."

"The best way of giving this salt consists in prescribing Vichy water as he recommends, and Guimbail declares also that alkalines should be given 'particularly in the form of Vichy water.' Bicarbonate, also, acts upon stasis, and it is, moreover, a powerful tonic of the heart and the circulation, at a time when it is necessary to act upon a vaso-dilatation, which, as it is caused by general acidity, is helped by the tonic action of bicarbonate supplementing that of digitalis, and of sparteine, which, as we have seen, form one of the terms of our 'therapeutic triad.'"

Jardet and Nivière, in their communication to the International Congress of Hydrology (1896), also pointed out the beneficial action of this water in chronic intoxication by opium and morphia. "They do not consider, however," says Lebeaupin, "that it constitutes a complete treatment. The cure of Vichy, as generally practised, is not sufficient alone, but if, as we have seen, alkaline waters enter for a large part into the therapeutic means to be employed, they do not constitute a complete method."

"Heart tonics," he goes on to say, "and especially hydropathic measures, are also necessary, not to mention accessory medication, rectal injections, suitable conditions of existence and general management, which must be employed concurrently with the three great indications of the method."

This opinion is now universally accepted by French writers, and in all modern text-books heart tonics and Vichy water are indicated as essential elements of the therapeutic treatment. (a)

It has been said that the use of bicarbonate has been exaggerated under the name of "chemical demorphinisation" into an independent treatment, and after Erlenmeyer the late Professor Joffroy declared himself, some ten years ago, in favour of this so-called "method." It was this exaggeration that no doubt delayed the recognition by others than specialists of the value of Vichy water as a symptomatic treatment.

It must, however, be pointed out that in some exceptional cases, which, of course, do not prove the rule, those who are determined to give up the use of morphia if they can obtain sufficient relief have sometimes found that Vichy water was all that was necessary to diminish the general discomfort to a degree compatible with renunciation. Dr. G. Clermont, in a recent article published in the *Centre Médical*, quotes Glenard, who has reported a case, the interest of which resides in the fact that this mineral water was given by hypodermic injections. The patient in question, a

(a) Crothers, who fitly represents American medicine (*op cit*), says: "Great stress is laid upon the use during the entire treatment of preparations of soda to prevent or neutralise the acidity of the stomach or bowels. This is very essential in all methods of treatment."

(a) See Martindale's "Extra Pharmacopœia."

physician, "about 30 years old, was suffering from 'hepatic paludic neurasthenia,'" and for a year he had been injecting under the skin every day 10 centigrams of morphine, and, further, took chloral or bromidia. He had symptoms of anorexia, insomnia, weakness, vertigo, headache; he had lost 22 lb. in weight; the liver was supple, ptosed, and sensitive to pressure. He subjected himself to the following treatment: 600 gr. every day of Grand Grille water, and 7 gr. of sulphate of soda every morning; restricted diet, cold douches, and every day two hypodermic injections (morning and evening) of Grande Grille water.

He took at first 1 gramme at each injection, afterwards 3 grammes; the third day 5 grammes, the fourth day 10 grammes, the following day he gave himself an injection of 40 grammes, then 60, and afterwards, between the sixteenth and twentieth day, 90 grammes every day. There was never the least local reaction, but on the first days he felt several times, ten minutes after the injection, a sensation of excitement, followed after fifteen minutes by one or two hours' depression. From the eighth day appetite and strength returned.

He reduced the morphine to 3 centigrammes; on the twelfth and thirteenth day some gastric pains (thermal crisis) obliged him to give up for a time the ingestion of water, but not the hypodermic injections.

From the fourteenth day there was general improvement, which increased to the end, but his weight had decreased by 4 lb.

"I saw our *confrère*," said Dr. Glenard, "again a month later in Paris. He was well, and his weight had gone up 6 lb. He had no more symptoms of depression, the injections of morphine were abandoned."

"Glenard's observations," says Clermont, "lead us to suppose that Vichy water, by hypodermic means, has a useful action in a cure of demorphinisation," a conclusion which I can endorse completely. (a)

### A NOTE ON ACROMEGALY.

By J. C. MCWALTER, M.A., F.F.P. AND S.GLAS.,  
M.D.BRUX.,

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THE general practitioner is described in journals like the *Daily Mail* as the man in actual practice. Medicine as known to the practitioner is one thing; as known to the professor of pathology or the operating surgeon quite another thing. Dante said of Aristotle that "he saw life steadily, and saw it whole." Herein we can emulate the great philosopher; we can see the history of the patient steadily—and see it whole. Thus one may read of the pæans of joy of the operative surgeon over his fifty cases of gastro-enterostomy sent out cured, without a death; but the mere practitioner sees most of these cases get as bad as ever after a year or two, or die in the work-house ward. He also sees that cases quite as bad, and not operated on, are probably much better after an equal interval of time. Lately we are being told on high authority that there is a certain self-limitation about cancer. There is not one of us but has known of such cases, but we feared to state our experience against the *dii majores* of the hospitals.

The chief reason why the general practitioner's opinion does not command respect is that he fails to commit his experiences to print. Thus the accumulated wisdom of the individual dies with himself, and posterity gains nothing from it; further, the fewness of the articles from practising physicians tends to create an impression of their unimportance. Hence, although I know that descriptions of cases are deadly dreary stuff, I venture to describe a case of acromegaly now under my care.

(a) Glenard says that Vichy water is nearly iso-tonic, that the proportion of mineral substance in it is the same as is adopted for the composition of artificial serums. Its use as a serum would be rational, for the doctrine of sero-therapeutics admits a dynamic action of a stimulus which develops the potential activity of the leucocytes.

This dynamic action would be greater in natural mineral waters, inasmuch that, besides other vitalising principles, they contain argon and helium, as well as being radio-active, and their efficacy in small doses might certainly be greater by hypodermic injection, than when given by the stomach.

Acromegaly, as the name implies, is a chronic affection in which the extremities of the body—the hands, the feet, the face, the head—become greatly enlarged. It was first described by Marie in 1886, and since that time some 240 cases have been recorded. Though the pathology is unknown, many believe it to be connected with an hypertrophy of the pituitary body.

My patient is a man over 50, and a casual glance shows nothing abnormal except a certain awkwardness of gait and a somewhat hydrocephalic appearance of the head. Minuter examination shows that the cranium is enormously large, and the patient states that for years past he has been compelled to wear bigger and bigger hats. Unlike the majority of recorded cases, the growth is by no means so great in the upper or lower jaws as in the cranial bones. On further inspection, the left clavicle is seen to be enormously enlarged, whilst the right bones appear comparatively normal. Excessive hypertrophy is next observed in the right wrist and on the crests of the ilium. I happen to have another man with acromegaly under observation; he is a coachman, who enjoys fair health except for occasional headache and giddiness; but in his case the jaw-bones are enlarged, giving his face a long, lantern aspect, whilst his hands and arms appear to be uniformly hypertrophied. The first patient does not complain of headache—though it is a common symptom—but of shortness of breath, a feeling of extreme prostration—in spite of a good appetite—and a feeling of dread in walking the streets. His thorax appears abnormally rigid, but no cardiac or pulmonary trouble can be detected, and the occasional dyspnoea is probably due to flatulence. In acromegaly, as a rule, the sense of hearing presents no anomalies whatever, but in this case deafness was marked and troublesome. Nervous symptoms are usually rare, but this man was frequently depressed, somewhat hypochondriacal, and acutely conscious of his condition. Appetite was variable, but frequently good; the skin of the forehead and face was darkened, coarse, and apparently thickened. A gloomily lachrymose expression of countenance became constant. The lower lip seemed notably enlarged, the tongue hypertrophic, and the speech slow rather than awkward or clumsy. The chest was somewhat enlarged, and the pelvis broader, but the abdomen somewhat flattened. The general movements were awkward, the grip of the hand weak, and the patient very easily fatigued. A tendency to somnolence existed, but no very marked loss of memory, and no suggestion of dementia.

Dercum, of Philadelphia, states that preparations of the thyroid gland are without effect in acromegaly. This is not my experience in the present case. The patient had been on thyroid treatment but a very short time when very considerable improvement was noted—in fact, it appeared to give satisfactory results much sooner than desiccated pituitary gland, which is the recognised treatment. One case, of course, goes for little in establishing the effect of a remedy, but the therapeutic effects of drugs in this disease have hitherto proved so disappointing that any definite result ought to be recorded.

### OPERATING THEATRES.

#### GUY'S HOSPITAL.

APPENDICITIS WITH SPREADING PERITONITIS.—MR. R. P. ROWLANDS operated on a boy, æt. 9, who was suffering from acute appendicitis. There was no history of previous attack. The patient was admitted into hospital twenty hours after the onset of the first symptom; this was acute abdominal pain, which was soon followed by vomiting. On admission the temperature was 101°, the pulse 110; the face was flushed, and the abdomen, especially in the right lower portion, was rigid, fixed, and exquisitely tender. No lump could be felt; the resonance of the right iliac region was slightly impaired. Upon rectal examination, an indefinite, tender swelling could be felt on the right side of the pelvic brim; there was marked leucocytosis. The patient was restless. Immediate operation was decided upon. The abdomen was opened at

the lower part of right rectus, and thin sero-pus at once escaped. Gauze pads were passed first into left flank and then into the pelvis, and left *in situ*, while the cæcum and appendix were sought for. These structures were found lying on the right side of the pelvic brim, with the appendix hanging into the pelvis. There were no adhesions, so they were easily brought out into the wound and packed off. The meso-appendix was clamped, divided, and ligatured with catgut; the root of the appendix was crushed with large Spencer Wells forceps, divided, and inverted by means of a sero-muscular pulse-string catgut suture placed in the cæcum. The abdomen was cleansed with mops moistened in saline solution, the pad was withdrawn, and the abdomen entirely closed in three layers of sutures.

Mr. Rowlands said it was generally admitted to be advisable to remove the appendix in the interval after one definite attack, because one attack is known to predispose to another, and no one can foretell whether the second attack may not be grave, or even fatal. There is not the same unanimity as to the treatment to be adopted during an attack. He felt strongly that the best course is to operate as soon as the diagnosis is made, and, if possible, within twelve hours, or, failing this, within twenty-four hours of the first symptom. By adopting this course, a mortality of from 14 to 20 per cent. (as given by physicians of authority) ought to be reduced to about 2 per cent. in all cases seen in time. This plan, which he recommended, nearly always avoids dangerous and troublesome complications, and saves much time, anxiety, and expense. Prominent amongst the dangerous complications referred to are spreading peritonitis, localised abscess, empyæma, and other pulmonary complications, and sub-diaphragmatic abscess, vascular infections, especially portal pyæmia or pyelo-phlebitis, intestinal adhesions with secondary intestinal obstruction from bands, etc. Some of the troublesome ones that may be mentioned are ventral hernia and chronic constipation. By operating early nearly all these can be avoided, for usually the appendix can be easily found and removed in a few minutes, the abdomen thoroughly cleaned before the peritoneum has become extensively and deeply infected, and the abdominal wound can be entirely closed in the great majority of cases at this stage, with the obvious advantages he had already mentioned. When an operation is undertaken after about 24 or 36 hours it is a more difficult and dangerous matter, and the abdominal cavity has to be drained in many cases; so that at this stage it is an open question whether it is better to operate at once or to wait for the interval. If the signs and symptoms are not getting worse he generally prefers to wait, but only on condition that the patient be very carefully watched and be within reach of immediate surgical aid, in case symptoms of peritonitis or abscess supervene. Prominent among the alarming symptoms may be mentioned: increasing rigidity, tenderness and pain in the abdomen, vomiting, quickening pulse, increasing temperature, or sudden collapse, profuse sweating, and leucocytosis. These symptoms call for immediate operation. In such cases he believes it is nearly always wise to remove the appendix, and not merely to drain, as some surgeons recommend. Removal of the appendix can add very little to the danger of the operation if the pus be freely mopped away first, and any healthy part of the peritoneum protected by careful packing. Whenever possible in these late cases calling for drainage he drains through the vagina in women and the loin in men, in order to avoid ventral hernia and to hasten the recovery.

Ten days after the operation the patient is convalescent, not having had a bad symptom. The wound is entirely healed. He has, in fact, as these early cases do, behaved just like all patients who are operated on in the interval.

THE whole of the elementary schools of Wolverhampton, numbering about thirty, were ordered to be closed on account of an epidemic of measles. Over 17,000 children are on the registers, and a large number are affected. In one school alone one-third of the children are down with the complaint.

## SPECIAL REPORTS.

### REPORTS OF THE INSPECTORS OF LUNATICS AND THE REGISTRAR-GENERAL FOR IRELAND.

THE Annual Report of the Inspectors of Lunatics in Ireland was laid on the table of the House of Commons during the past week. It shows that the number of insane in district, criminal, and private asylums in Ireland was, on January 1st, 1909, 23,931, being an increase of 213 over the corresponding figures for the previous year.

During 1908 the numbers in district and auxiliary asylums increased by 527, those in the Dundrum Criminal Lunatic Asylum by 10, and the Chancery patients in unlicensed houses by 13, while the numbers in workhouses decreased by 330, and those in the private asylums and institutions for the insane by 7.

A table giving the number and distribution of all lunatics under care on December 31st of each year from 1880 to 1908 shows that in this interval of time an increase of 10,949 has taken place in the total inmates of district and auxiliary asylums; the criminal lunatics in Dundrum Asylum have decreased by 9; the patients in private asylums and institutions have increased by 241, while the pauper lunatics in workhouses have decreased by 790.

The decrease in the number in workhouses, which has been steadily taking place for several years past, still continues, and the number remaining in these institutions at the end of 1908 was considerably lower than at any time since the first year shown in the table—viz., 1880.

The increase in the total number of the insane under care at the end of 1908, as compared with the number remaining at the end of the previous year, might lead to the erroneous impression that an absolute increase of insanity had taken place amongst the community; but, in reality, the numerical increase is mainly the indirect result of transfers from one class of institution to another—i.e., the transfers to asylums of the inmates of the imbecile wards of workhouses. As no certificates of insanity are required for the cases maintained in workhouses, the vacancies caused by such transfers are quickly filled up by paupers suffering from the mental decay of old age, and these cases, which were not previously classified as insane, are then, for the first time, returned among the insane inmates of the workhouses—thus swelling unduly the number of the insane under care. During the year 1908, 816 cases were transferred from workhouses to asylums—being over 21 per cent. of the total number of admissions to the latter institutions. This percentage was higher than that of any year since 1904.

In the Commissioners' annual reports from year to year they have dealt with the prevalence of tubercular disease in the asylums of Ireland. That tubercular disease should be so frequently met with in these establishments is not strange, having regard to the close connection between tubercle and insanity. Both are stigmata of degeneration, in certain cases, either breaking out simultaneously in different members of the same family or attacking at different times and at different ages those who have the same hereditary seeds of degeneration. "It must be admitted," continues the report, "that, having regard to the small number of post-mortem examinations in the asylums of this country, and the recognised difficulties attending the examination of the insane, our statistics do not disclose the full effects of the ravages of this insidious malady. A high proportion of tubercular disease in some asylums might be due either (1) to the patients being received from a part of the country where it is prevalent, or (2) to its propagation in the asylum, as the disease, having been once introduced, would be easily propagated in surroundings where, in many cases, owing to the overcrowded conditions which prevail, the infection would rapidly spread amongst a class of people whose constitution renders them a ready prey to the ravages of the disease."

The Annual Report of the Registrar-General for Ireland has also been issued, and although the full text is not as yet available, a few figures may be of interest to our readers pending a fuller notice of the Report.

The return for the year 1908 show that the excess of births over deaths was 25,148, and that the loss by emigration amounted to 23,295 (which number is less than the number of emigrants enumerated in 1907—namely, 39,092, and also the average number—38,036—for the ten years, 1898-1907). There would, according to these figures, appear to have been an increase of 1,853 in the population on December 31st, 1908. With respect to immigration, there is no official record, nor is it taken into account in the estimate of the population to the middle of the year, which was 4,371,455.

During the year 1908 the number of deaths registered in Ireland was 76,891, equivalent to 1 in 57, or 17.6 per 1,000 of the population, estimated to the middle of the year. The death-rate (17.6) is 0.1 below that for the year 1907, and 0.2 under the average rate for the preceding ten years. The total number of deaths from all forms of tuberculous disease was 11,293, as against 11,679 registered in the year 1907, the former figure representing a death-rate from the disease of 258 deaths in every 100,000 of the population, and the latter a rate of 267 per 100,000 of the population.

For the four Provinces the recorded death-rates are as follows:—Connaught, 13.8; Munster, 16.1; Ulster, 18.1; and Leinster, 19.1 per 1,000 of the population, according to the Census of 1901.

On the subject of tuberculosis in Ireland, the Registrar-General says:—"It is my pleasing duty to have the honour of reporting to your Excellency the fact that the rate of mortality per 1,000 from all forms of tuberculosis declined during the year 1908 to 2.6, the corresponding figure for the three years 1905, 1906, and 1907 being 2.7. When the actual numbers are taken it appears that as compared with the mortality of the previous year there were 386 fewer victims to the ravages of the disease, which is a matter for much congratulation. A further satisfactory feature, moreover, is that the decline is observable in the pulmonary cases, which number 8,511, as compared with 8,828 in 1907. I earnestly trust that this may be the beginning of a gradual fall in the death-rate from this terrible malady, and that the magnificent anti-tuberculosis campaign inaugurated and carried on through the agency of the Women's National Health Association of Ireland—by Her Excellency the Countess of Aberdeen—has begun to tell on the mortality records of our island. The Tuberculosis Exhibitions held under the auspices of Her Excellency in almost all its large towns, and the tuberculosis vans which under her direction have travelled through many of the rural districts, have instructed the people as to the infectious nature of the disease, and the means of protecting themselves from its ravages, and evidences are not wanting that the lessons thus inculcated are bearing fruit, and that in many places there has been a material change for the better amongst our people in their habits and surroundings."

Proceeding to a comparison as to what is happening in connection with this dread disease in England, Wales, Scotland, and Ireland, the return states that in 1864 in England and Wales the rate was 3.3 per 1,000, and in the year 1907 it was 1.6 per 1,000. In Scotland in 1864 the rate was 3.6 per 1,000, and in 1907 it had fallen to 2.1 per 1,000; and in Ireland the rate, which in the first year of the period was 2.4 per 1,000, was 2.6 per 1,000 in the year 1908, having declined to this from the rate of 2.7 per 1,000, representing the mortality from tuberculous disease in Ireland in each of the years 1905, 1906, and 1907.

## CORRESPONDENCE.

FROM OUR SPECIAL CORRESPONDENTS  
ABROAD.

### FRANCE.

Paris, July 18th, 1909.

#### PURULENT OPHTHALMIA.

At a recent meeting of the Académie de Médecine, Dr. Motais communicated a series of cases of purulent

ophthalmia treated with invariable success by the following method:—

Irrigation of the eyes as often as necessary—that is to say, each time that a small quantity of pus appears between the lids—with a small plug of absorbent wool steeped in a solution of permanganate of potash (5 gr. to a quart).

The eyelids should be drawn apart as much as possible, but without the use of instruments, for fear of injuring the epithelium of the cornea.

In case the secretion tends to stick the eyelids together in drying, the edges are painted with an ointment of vaseline and iodoform (1—50).

Besides the constant application of the permanganate solution, 2 drops of a solution of protargol are instilled every six hours, and in severe cases every three hours:—

Protargol, 15 gr.

Water, 1 dr.

Ulceration of the cornea is no counter-indication to this strong solution; on the contrary, when present, it heals rapidly under its influence.

By this treatment, if followed methodically, the secretion diminishes from the first day. At the end of the third or fourth day it has almost disappeared; the strength of the solution may be diminished by one-half, and continued until a complete cure is obtained.

The author concluded by suggesting that protargol should be substituted for the classical nitrate of silver, which can hardly be trusted to inexperienced hands, whereas protargol is at least just as active and absolutely inoffensive.

#### NEURALGIC AND MIGRAINE POWDERS.

Antipyretic and analgesic substances practically belong to three well-defined chemical groups:—

Antipyrin and its derivations;

The derivatives of aniline;

Quinine and its derivatives.

It is substances of these three groups, says Dr. Martinet, which, isolated or combined, form the basis of all the powders and wafers reputed as specifics for neuralgia or sick headache.

Antipyrin, produced by Knorr in 1884, is the most ancient and most celebrated of anti-neuralgic substances. Its action is powerful and regular, and merits all the success it has acquired. However, antipyrin has furnished other salts which can bear comparison with the original.

Such is pyramidon, which can frequently be substituted, and sometimes with advantage to antipyrin; such may also be the case of salpyrin, a combination of antipyrin with salicylic acid.

Aniline is a powerful antithermic, but cannot be used on account of its toxic properties; but its derivatives—acetanilid, exalgin, phenacetin, lactophenin, citrophen, salophen—have all taken their place in the modern pharmacopœia. The first two (acetanilid and exalgin) should be prescribed only in one or two-grain doses, as they are more or less toxic.

Quinine and its salts represent the last group of antipyretic and anti-neuralgic substances.

Besides the usual salts (sulphate, hydrochlorate, hydrobromide), the most interesting derivatives are: aristochin, euquinin, and quiniiform.

The two former possess the advantage of being exempt from the bitterness which renders the administration of quinine to children almost impossible; quiniiform, being very soluble, may be administered hypodermically.

The synergic association of the three groups can be realised as follows:—

Phenacetin, 5 gr.

Hydrochlorate of quinine, 5 gr.

Antipyrin, 10 gr.

For 1 wafer; recommended in grippe.

The following formulæ are much used for migraine:—

Caffein, 1 gr.

Hydroch. of quinine, 2 gr.

Salipyrin, 10 gr.

Or,

Citric acid, 1 gr.

Caffein, 2 gr.

Antipyrin, 15 gr.



Or,

Caffein, 1 gr.  
Phenacetin, 8 gr.  
Salipyrin, 8 gr.

The addition of citric acid favours gastric tolerance.

All these formulæ might, in any case, be transformed into effervescing powders by adding tartaric acid and bicarbonate of soda:—

Antipyrin, 15 gr.  
Bicarb. of soda, 1 dr.  
Tartaric acid, 30 gr.  
Citric acid, 20 gr.

For 1 effervescent powder.

The following works wonders in dental neuralgia:—

Hydrochl. of morphia, 1/5th gr.  
Bromide of potassium, 10 gr.  
Antipyrin, 10 gr.  
Citric acid, 40 gr.  
Tartaric acid, 40 gr.  
Bicarb. of soda, 1 dr.  
Lactose, 1 dr.

For 1 effervescent powder; 2 daily.

#### ATROPINE AND ASTHMA.

Nearly all cases of asthma, of no matter what origin—cardiac, renal, nervous, etc.—are rapidly relieved by a 1/4 of a milligramme (1/250th gr.) of atropine, given in the form of pill or granule twice a day. It acts like a charm, and is immensely superior to injections of morphine, which cannot be always employed.

#### GERMANY.

Berlin, July 18th, 1909.

At the Medical Society Hr. Ed. Meyer showed a patient for whom he, along with Borchardt, had operated for

#### CANCER OF THE LARYNX.

First, he made a laryngo fissure, but shortly afterwards had to perform total extirpation, whereby, however, the epiglottis was retained and used as a cover for the wound of the pharynx. The wound healed up to a small œsophageal fistula; an attempt made to close this some time afterwards failed. For some time, therefore, the patient wore a Gluck's œsophageal tube. Later on the edges of the fistula were freshened, and the wound united by sutures in stages; by this means the opening closed. Phonation was bad, but the patient, who was himself a medical man, objected to wearing an artificial larynx, and made out with writing and deaf and dumb signs. A second patient was a girl of 19, who had had tracheotomy performed for diphtheria nine years ago, and who up to only a short time ago had been unable to get on without a tube. The speaker saw a cicatrix in the larynx just below the vocal cords; he dilated the tracheotomy fistula upwards into the larynx, excised the cicatrix, and made the larynx permeable again. Phonation had remained bad, as the vocal cords had been destroyed by the diphtheria.

#### Discussion on

#### HR. ROTHSCHILD'S PAPER ON THE ÆTIOLOGY OF HYPERTROPHY OF THE PROSTATE.

Hr. Casper recognised no connection between gonorrhœa and prostatic hypertrophy, although the former was looked upon as the essential cause of the prostatitis. Stricture was the very special consequence of gonorrhœa, and this was scarcely ever seen in connection with hypertrophy of the prostate. In the histories of prostatics, also, gonorrhœa was not unfrequently absent. Pathologically the hypertrophy was to be looked upon as a fibroma, or in more rare cases an adenoma, whilst it was only in rare cases that it was a simple overgrowth of connective tissue. If these things were so, the conclusions drawn by the reader of the paper in regard to treatment fell to the ground.

Hr. Mankiewicz pointed out that inflammation generally led to contraction, and the hypertrophied prostate usually contained as good as no secretion. Hr. Manasse said that if the views of the reader of the paper were correct, round cell infiltrations must be everywhere met with in hypertrophy; but that was not the case. If prostatitis could cause hypertrophy the latter would be observed in young people, as prostatitis was a disease of youthful age.

Hr. Rothschild, in the face of all these objections, still maintained his ground, and supported his position by the aid of numerous authorities. Hr. Fritz Meyer followed with a contribution to the

#### SERUM TREATMENT OF DIPHTHERIA.

He had been trying to get to the bottom of the 12 to 15 per cent. of deaths that still remained, even with the most favourable diphtheria statistics, and to avoid them. He distinguished four kinds of cause of death: 1, acute cardiac death; 2, too late or insufficiently treated cases; 3, deaths during re-convalescence from paralysis of the heart, or other post-diphtheritic paralyses; 4, cases of post-diphtheritic cachexia.

Acute cardiac death was due to vasomotor paralysis; if a rabbit were poisoned with diphtheric toxin the blood pressure sank. If this effect had once taken place, death could not be prevented by the serum, whilst injection of the serum in time prevented the sinking. After manifold attempts, he had succeeded in reaching the hypertoxine by the timely intravenous injection of efficiently large doses of toxine. If these doses were given in time, death was averted. For human treatment he proposed in these hypertoxic cases, where acute cardiac weakness was threatening, to inject larger doses, or even inject them into the veins. Cardiac stimulants appeared to be quite useless in these cases; adrenaline alone appeared to be of any use. If an energetic effect was to be obtained with serum large doses must be given from the first, a commencement should be made with 4,000 units of antitoxine, and the day after as much more should be given, or even more if necessary. A very carefully prepared serum without carbolic acid should also be kept in readiness for injection into the veins if required. Myocarditic changes could be set up in animals by toxins, if they could be kept alive long enough, the onset of such myocarditic changes in man were guarded against by the uses of serum. Post-diphtheritic cachexia, degenerative changes of various organs, were sometimes set up in animals, and an enlarged dose of serum protected the animal against these changes.

The speaker was of opinion that such cases as were being lost by the ordinary use of serum might be saved by larger doses or by intravenous injection.

Hr. Eckert had collected 40 cases of death from the Heubner Klinik during the last 10 years, and only 10 of them received injections in time. In bad cases very large doses had been given, and now and then injections had been given intravenously, without the small quantity of carbolic contained in them doing any harm. Assistance was necessary for this, however, where this could not be had the injections were made into the muscles. If toxic symptoms appeared during the course of the disease, large doses should be given afresh. He had also seen good from the subcutaneous employment of adrenalin, the only injurious result from the use of it was a transient glycosuria occasionally.

Hr. Ritter objected to excessive doses such as 40,000 units.

Hr. Heubner considered it an advance that we not only sought to bind the poison, as we did formerly, before it had attacked the organs, but that even when it had we tried to overcome it by correspondingly large doses.

#### AUSTRIA.

Vienna, July 18th, 1909.

#### HYPOPHYSIN.

HOCHWART and Frölich have been experimenting with the pituitary body, and gave the members of the Gesellschaft at the last meeting the benefit of their results. They find that hypophysin acts principally on the sympathetic (partially) and the "autonomy" nerve system; the latter is exemplified in the "nervus pelvicius." This extract was injected into cats, dogs, and guinea-pigs, with much the same results—viz., stimulating the bladder to contraction and irritating the automatic nerves, the nervus pelvicius, which was highly sensitive to the Faradic current after injection; the uterus in the female was also hyperæsthetic. Hypogastric nerves (sympathetic system) were not influenced by the injection. Repeated in-

jections, however, become gradually weaker in their action, but no alteration takes place in the blood pressure. The hypophysis does not act on the salivary glands, the vagus, nor the "nervus erigens," but the pupil is slightly contracted by it. Thus hypophysis acts differently to adrenalin, the latter being a stimulator of the sympathetic system, the former only of a few of the sympathetic and a few of the automatic nerves, particularly in the abdomen.

When disease commences or is induced in the hypophysis cerebri from before backwards, "dysgenitalismus" is the result. We can also have great disturbance in the bladder by tumours or enlargement of the hypophysis cerebri without having acromegalia present, which is not an uncommon occurrence, probably due to the loss of hypophysial secretion.

Hypophysis is non-poisonous, and may be freely used for clinical purposes in stimulating the uterus and bladder.

Pál said he now perceived that hypophysis was not a simple body, but a compound or complex one. According to Schaffer, this extract raised the blood-pressure, but Hochwart and Fröhlich tell us that it does not affect the circulation, but has a tendency to lower it. This may be due to the latter's observation that it acts on both the automatic and sympathetic nerves.

Tandler thought the infundibular part of the hypophysis cerebri was more cerebral than glandular, and, in operating for tumours, this part should be left and only the glandular part removed, which is probably the real part that aggravates the acromegalia.

Falta said he had injected hypophysis into a few patients, and certainly obtained a distinct diuretic result, the quantity of urine rising from 100 centigrammes to 150. The infundibular part, he found, had a stimulating action on the metamorphosis of the tissue.

Biedl believed that the infundibular portion of the hypophysis had a special function peculiar to itself, notwithstanding its origin in the nerve system. We have a similar analogy with the central nerve system in the medulla of the supra-renal body. Again, there are many substances enter the blood that produce pupillary dilatation and are not specifics. There is certainly a difference between hypophysis and adrenalin, though both act similarly with alkaline methylamine.

#### OPERABLE CARCINOMA.

Zinner next raised the question which has often been discussed: When should we operate? With the example of 123 cases before him of operations in the bowel for carcinoma, he could only refer to the percentage of success as an answer. Four of the 123 were squamous epithelioma and 119 cylindrical carcinoma. The average results were best in the latter, particularly amongst the gelatinous adenomatous cancer, of which there were 41 per cent.; in the non-gelatinous adenoma there were 24 per cent. of recoveries. The gelatinous carcinoma will heal well, but has a peculiar proclivity of forming metastases. Every form of the cylindrical cell carcinoma will heal, but the really malignant should be left untouched.

Hochenegg remarked that every carcinoma with these simple anatomical properties will heal and recover, but the real diagnostic sign of an operable case was its motility and glandular infection.

Rosthom said that from 100 uterine operations for cancer he had come to the conclusion that the histological constituents were of no value to determine an operation. Small carcinomata, in consequence of their extensive infiltration of the lymphatics, have little chance of healing, while large growths, with the same anatomical consistency, recover quickly.

### FROM OUR SPECIAL CORRESPONDENTS AT HOME.

#### SCOTLAND.

EDINBURGH UNIVERSITY—CHAIR OF SURGERY.—The following are applicants for the Professorship of Systematic Surgery in the University of Edinburgh, rendered vacant by the resignation of Mr. Chiene:—

Charles W. Cathcart, M.B., F.R.C.S.Eng. and Edin., John Wheeler Dowden, M.B., F.R.C.S.E., Alex. Miles, M.B., F.R.C.S.E., James W. B. Hodsdon, M.D., F.R.C.S.E., Henry Alexis Thomson, M.D., F.R.C.S.E., David Wallace, C.M.G., M.B., F.R.C.S.E. The Curators meet on the 21st inst. (to-day) for the purpose of making the appointment.

EDINBURGH SICK CHILDREN'S HOSPITAL CONVALESCENT HOME.—The newly erected Convalescent Home in connection with the Sick Children's Hospital, situated at Muirfield, Gullane, was formally opened by Mr. James Clark, Chairman of the Directors, on July 17th. The Convalescent Home is mainly due to the generosity of the late Miss Meikleham, who left Muirfield House and the residue of her estate for the purpose. The original intention of the directors was to reconstruct the old mansion house, but eventually it was decided to pull it down and erect a new building on the site. The Convalescent Home, from plans by Mr. R. S. Lorimer, R.I.B.A., consists of a centre block of administrative buildings, two storeys high, with east and west single-storey dormitories connected by a glazed verandah, which may be utilised as a covered playground for the children. Accommodation for 24 cots is provided. After Mr. Clark had explained the scope of the Convalescent Home, he handed a gold key to Mrs. Maconochie, who then formally opened the building. Mr. H. J. Stiles, surgeon to the hospital, in proposing a vote of thanks to Mr. Clark, expressed the indebtedness of the staff to the directors for providing an additional means of cure of tuberculosis of bones and joints, and so diminishing the number of crippled children in the community.

PUBLIC HEALTH OF EDINBURGH.—In his first annual report on the public health of the City of Edinburgh, Dr. Williamson, the new Medical Officer, has had the good fortune to chance upon a record year, for the mortality he has to report—13.37 per 1,000—is the lowest in the annals of the town. The special efforts which have been initiated to reduce the infant death rate have been attended with a considerable measure of success; the first step was the adoption of the Notification of Births Act, and the second the appointment of a lady health visitor, assisted by a number of voluntary health visitors. It is as yet too early to deal in detail with the work of these ladies, but the outstanding fact remains that during the year under review the infantile mortality was at the rate of 114 per 1,000 births, compared with 121 per 1,000 in 1907, and 147 per 1,000 ten years ago. This implies that 257 children reached their first birthday in excess of the number who would have done so if the infantile death-rate of ten years ago still prevailed. The noteworthy point in connection with zymotic diseases are, first, that on account of the prevalence of scarlet fever, the notifications were slightly above the average; second, that the case mortality is lower than ever before—.69 per 1,000, as compared with .88 in 1907, and 1.01, the average for the past few years; and third, that typhoid fever is vanishing. Only 55 cases occurred during the year as compared with the previous average of 178. This is undoubtedly a result of the improved sanitary administration of the city, and justifies the hope that enteric, like typhus, may some day be a thing of the past.

The compulsory notification of phthisis is being carried out in a harmonious manner as regards the medical profession and the citizens generally. Dr. Williamson urges the need for some arrangement being perfected between the Victoria Hospital and the local authority in order that the information at the disposal of the former may be transmitted to the Medical Officer of Health. In the usual statistical tables a great deal of information is given. The birth-rate in Edinburgh was only 21.4 per 1,000, the only other large towns giving so low a figure being Bradford (20.2) and Brighton (21.3). The decline in the infantile mortality, referred to above, is part of a general decline which has been going on for many years, but when different parts of the town are compared it is seen that there is still much room for betterment. Thus in one area in St. Giles' Ward the mortality is 232 per 1,000, in the Cowgate 344, in the Grassmarket and West Port 214, in Greenside 184, in the

Lawnmarket 170. Turning to the principal causes of deaths, it is shown that tuberculosis accounted for 13 per cent. of all deaths, and cancer for about 7 per cent. There is a decrease in the deaths ascribed to alcoholism, but influenza and diarrhoea account for a somewhat heavier mortality than in 1907. There were 32 suicides during the year.

**GLASGOW UNIVERSITY—RETIREMENT OF PROFESSORS.**—Principal MacAlister presided over the summer graduation ceremonial on July 13th, and after the degrees had been conferred, he called in Professor Cleland to say a few valedictory words on the occasion of his retirement. Professor Cleland said that nobility of purpose was the most effective stimulant to study as well as to the performance of duty at the bedside, and it ennobled the whole acquisition of knowledge of any description. Even vivisection—that bugbear of unbalanced minds and of many who would be thought kind-hearted, and thought themselves so—even vivisection was made noble by the amount of suffering it prevented, and which could be prevented by no other means. He had often noticed that his friends who were obliged to resort to vivisection had the most praiseworthy fondness not only for man, but also for bird and beast.

The Principal said he could not dismiss the assembly without voicing, in the name of the whole university, the debt they owed Professor Jack and Professor Cleland for what they had been and what they had done for Glasgow during the last 30 years. He wished them in their happy retirement the rest and enjoyment they had so admirably earned.

### BELFAST.

**ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.**—The Seventy-seventh Annual Meeting of this Association will be held here on July 23rd, 24th, 26th, 27th, 28th, 29th and 30th next, under the presidency of Sir William Whitla, Professor of Materia Medica and Therapeutics, Queen's College, Belfast. Fifteen Scientific Sections have been arranged and will meet daily from Wednesday to Friday in the Queen's College at 10 a.m., viz.:—Anatomy and Physiology, Dermatology and Electro-Therapeutics, Hæmatology and Vaccine Therapy, Diseases of Children, Navy, Army and Ambulance, Hygiene and Public Health, Laryngology, Otology and Rhinology, Medicine, Obstetrics and Gynæcology, Ophthalmology, Pathology, Pharmacology and Therapeutics, Psychological Medicine, Surgery, and Tropical Medicine. The programmes throughout promise particularly interesting discussion owing to the large attendance of men of eminence from foreign countries and various parts of the British Empire. On Tuesday, at 2.30, Sir William Whitla will be inducted to the Presidential Chair; while at 8.30 p.m., he will deliver his address in the Assembly Hall. On Wednesday, July 28th, at 12.30 p.m., Dr. R. W. Philip, F.R.C.P.E., of Edinburgh, will deliver an address on Medicine in the Library, Queen's College. On Thursday, July 29th, at 12.30 p.m., the address on Surgery will be delivered in the Library, Queen's College, by Mr. Edward James Barker, F.R.C.S. On Friday, July 30th, at 12.30 p.m., Sir John W. Byers, M.D., will deliver an address on Obstetrics in the Library, Queen's College. At 8 p.m. a popular lecture will be delivered by Dr. J. A. Macdonald. At 8.30 p.m., reception by the President and local members of the Ulster Branch in the Botanic Gardens. The annual dinner takes place on Wednesday, July 28th, and the same evening a ladies' reception will be given by the local members in the Grand Opera House, when plays will be performed by the Ulster Literary Theatre. Their Excellencies the Lord Lieutenant and the Countess of Aberdeen will visit Belfast during the meeting, and have accepted invitations to attend the President's address and various social functions. At the ladies' reception, on Wednesday evening, the Countess has kindly promised to welcome the visitors to Ireland.

**THE TUBERCULOSIS ACT IN BELFAST.**—At a recent meeting of the Public Health Committee of the Corporation, the Medical Officer of Health submitted a report upon this Act. He stated that he was exceed-

ingly doubtful of compulsory notification being of much utility, as the Act did not secure for the local executive sufficient power to make it effective. The prescribed forms of tuberculosis were too limited, and there were too many restrictions. Last year voluntary notification and the information obtained through the dispensaries resulted in the discovery of 1,213 cases, all of which were visited, often more than once. One part of the Act the Medical Officer welcomes specially, and that is Part III., which gives power of control over milk supplies. Only about a third of the milk used in the city is at present subject to proper inspection and control, that coming by rail from distant villages not being so subject. It is to be regretted that under the Milk and Dairies Bill now before Parliament this power would be greatly weakened and curtailed, and, acting on the advice of the Medical Officer, the Public Health Committee have agreed to make representations to the President of the Local Government Board of England to withdraw this repealing clause from the Bill. The question as to the adoption of Part I. of the Tuberculosis Act in Belfast is still under discussion.

## LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

### NORMYL TREATMENT.

*To the Editor of THE MEDICAL PRESS AND CIRCULAR.*

SIR,—My attention has to-day been called to the letter in your issue of June 30th, by a self-styled "Medical Temperance Reformer" which is not very complimentary to the Normyl Treatment Association, of which I am the Chairman.

The claims of the Normyl treatment, which are not advertised in the ordinary way, have been so often explained in public that I am a little surprised at your correspondent's ignorance, but I suppose it ought to be corrected.

No member of the Association has the slightest pecuniary interest in the sale of the Normyl treatment, and the only reason which makes me and the other members of my Committee enthusiastic in recommending it is, that we have daily and hourly proofs of its efficacy.

The 150 doctors who are customers of ours have no more reason for concealing their names or being ashamed of their proceedings than the hundreds of others who recommend patent medicines to their patients every day. Many of them have been kind enough not only to give us the use of their names, but also to speak on public platforms on behalf of the Normyl treatment. They don't pretend that it will work a miracle, nor does any member of my committee, but they confidently assure me that it is the best remedy which has yet come within their experience, and that is exactly what I feel about it, and all that I have ever said on the subject.

I can answer personally for the complete cure of many police court cases, which are generally considered the most hopeless, and if your correspondent has the slightest desire to know the truth, he will find at our office, in 91 Victoria Street, S.W., the best possible evidence that thousands have been cured by the treatment who but for it might still be enduring the utmost misery.

Your correspondent is at liberty to have the Normyl preparation analysed, as we have had on many occasions, but he will still find that there is one secret ingredient in the mixture, and if he will be kind enough to pay for it we shall be only too pleased to make it known. Unfortunately, the inventor wants something like £20,000 for the discovery, and this is too much for our purse.

We have tried to have a public inquiry by the Home Office or the Local Government Board, but although Parliament did sanction such an inquiry, the Departmental Committee decided that the question of remedial treatments for drunkenness was too intricate, and the research would be too expensive for them to undertake.

Secrecy is no doubt frequently the badge of fraud, but by no means always, and the most hopeless victims of illusion are often those who cannot accept a good thing which seems to contradict their theory, and are unwilling to credit those who differ from them with the same honesty as that with which they wish themselves to be credited.

I am, Sir, yours truly,

CECIL CHAPMAN.

The Athenæum, July 12th, 1909.

#### THE ANTI-VIVISECTION CONGRESS.

To the Editor of the MEDICAL PRESS AND CIRCULAR.

SIR,—Among the crowd of fanatics who, during the past week, have amused themselves in a wild orgy of mendacity and abuse, not a single name of any weight in science, literature, art, politics, or religion, with the exception I am about to mention, has appeared; and there need be no fear that their demonstrations will lead to the prevention of a single necessary physiological experiment, or do anything to check the beneficent efforts of scientific explorers. It seems to me, however, that notice should be taken of the appearance on the scene of the Venerable Archdeacon Wilberforce, Chaplain to the Speaker, who, at any rate, holds a distinguished position in the Church of England. He preached on Sunday morning at St. John's, Westminster, to the Congress, and a report of his sermon appears in the *Times* of to-day, July 12th. In that sermon he stated that there were no greater cruelties perpetrated in the world than those done in some of the physiological laboratories—he said "some" because he "gratefully acknowledged that there were some exceptions in the English laboratories." If Archdeacon Wilberforce knows of a single laboratory in which cruelty is perpetrated, it is his duty to name it. He does not name one, well knowing that he might be compelled to substantiate his statement in a court of law. It is a gross and cowardly libel, not less atrocious because uttered by a minister of the Gospel from the pulpit of a church of the English Establishment. Whatever the effect of Archdeacon Wilberforce's utterances in other directions may be, there can be no doubt about the injury they must inflict upon true religion, and upon the Church that he professes to represent.

I am, Sir, your truly,

PHYSIOLOGIST.

July 12th, 1909.

#### THE PRESS AND QUACK ADVERTISEMENTS.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—In an editorial note to-day you once more comment upon the attitude of the newspaper Press with regard to quackery. Whatever be its significance as a sign of the times, there cannot be the least doubt about the demoralisation in one direction which now characterises many newspapers. These are showing themselves almost completely unscrupulous in their money-making methods. The editors take up the rôle of censors of private and political morality, whilst the proprietors augment their incomes by deliberately participating in crime, knowingly opening their pages to advertisements designed to entrap the simple, suffering public into hands where they will be maltreated and plundered. I enclose, as examples, two advertisements now appearing in one of the papers which stands in the very front rank of journalism. One puff, as you will see, occupies a whole column, and is composed and printed to imitate editorial matter. I ask you, Sir, whether there can be any doubt in the mind of any man of the world as to the character of this puff, and whether the proprietors, the managers, and the editors of this great paper must not be well aware of its nature and aim?

To the second smaller advertisement I would particularly beg attention. It emanates from a quack whose methods were exposed some time ago in the Law Courts. His advertisement had previously appeared for months in this same paper, and yet a leader denouncing him, and sympathising with his victim, was published after the trial. This paper has been distinguishing itself by the same conduct for

some years, and I have repeatedly called your attention to it. In this case we must suppose that the editor himself is unable to see the enormous fraudulent puffs that strike the eye of every other reader of his paper. This editor has also, as I have previously made known to you, published leaders exposing certain kinds of City swindlers, whilst huge puffs of these same gentry have been regularly appearing in his pages. Such conduct of many leading papers has led to the further demoralisation of the majority of inferior ones. These now show themselves willing to add their editorial endorsement to the false statements of any rogue prepared to pay the price; their columns are crowded with fraudulent puffs. The whole thing constitutes a gigantic scandal. It can be put an end to only by exposure through a Royal Commission such as I have so long advocated. It has been over and over again demonstrated, and can be again easily proved in public, that the coarser forms of medical quackery are not only fraudulent, but cruel and murderous, and that the system could not be kept up without the help of newspapers suborned to promote a nefarious traffic with the nature of which they are fully acquainted.

I am, Sir, yours truly,

HENRY SEWILL.

The Old Rosery, Redhill, July 14th, 1909.

#### OBITUARY.

ARCHIBALD DONALD, M.D.GLASG., M.R.C.S., L.R.C.P.

WE regret to record the death of Dr. Archibald Donald, which took place at Penang, Straits Settlements, on June 14th last. Dr. A. Donald was a son of the late Dr. J. T. Donald, and succeeded his father as medical officer of health for the burgh. He resigned the medical officership in order to devote himself to the special study of surgery, and after spending about two years in London he returned to Paisley, and resumed practice in partnership with his brother, Hugh C. Donald, F.R.C.S.E. Four years ago he left Paisley to join a younger brother who was a medical practitioner at Penang, and liking the place, he remained there. Heart failure, following a chill, was the cause of death. Dr. Archibald whilst in Paisley was one of the leading medical men in the town, and in addition to being an M.D. of Glasgow he was an M.R.C.S. (England) and an L.R.C.P. of London. He was only 43 years of age, and was unmarried.

RAYNER WINTERBOTHAM BATTEN, J.P., M.D.LOND., F.R.C.P.

WE regret to announce that the death took place at Gloucester, on July 15th, of Dr. Rayner W. Batten, J.P., at the age of 74. Dr. Batten was appointed physician to the Gloucester Infirmary in 1867, which post he held until 1899, when, upon resigning, he was appointed consulting physician, a position he retained until the time of his death. As physician he became an ex-officio member of the General Committee of the Infirmary, and after his resignation he was elected a member in 1901. Other positions which Dr. Batten had held were those of consulting physician to the Gloucester Dispensary, and also to the Berkeley Cottage Hospital.

WILLIAM BROWN, M.R.C.S.ENG., L.R.C.P.ED.

WE regret to announce the death of Mr. William Brown, Consulting Medical Officer of Health for the City of Carlisle, who died at the Hydropathic Establishment, Craiglockhart, near Edinburgh. Professionally educated at Edinburgh University and the Royal College of Surgeons, Edinburgh, Mr. Brown was admitted a member of the Royal College of Surgeons, England, in 1872, and a licentiate of the Royal College of Physicians, Edinburgh, the following year. He was subsequently elected a Fellow of the Royal College of Surgeons, Edinburgh. He was the author of a long series of medical reports on the health of Carlisle, and had made other contributions to medical literature.

## SPECIAL ARTICLES.

### THE HENRY PHIPPS INSTITUTE FOR THE STUDY, TREATMENT AND PREVENTION OF TUBERCULOSIS.

WE have watched with interest the progress of the Henry Phipps Institute since its inauguration in 1903.

It began as an experiment amidst many difficulties; now it may be said that it has taken its place amongst the great institutions of the world engaged in the fight against tuberculosis.

With each passing year system is becoming established, and the methods of examination and classification are becoming more accurate, consequently the information gleaned is more precise and useful. In the volumes before us (third and fourth annual reports), the clinical and sociological reports of Dr. Lawrence F. Flick are of most general interest. Aliens and children of foreign-born parentage form a great portion of the population of Philadelphia, which therefore offers a useful field for investigating the incidence of tuberculosis amongst the various races comprised therein.

There are many fallacies which cannot be avoided in drawing conclusions from the figures given in the reports, still they provide us with much material for thought and speculation, and each volume which issues from the Institute brings us a little nearer to accuracy in results.

Incidentally we are impressed with the huge problem which confronts the Government of the United States in dealing with its alien population. Foreign-born citizens bring nearly one-half the burden of the crusade against tuberculosis in which the Institute is engaged, while about 32 per cent. only of all tuberculous patients treated were of native ancestry one generation back.

The foreign-born patients mostly came from the following countries—from the highest number down:—Russia, Ireland, Germany, Italy, England, Austria, Hungary, Poland. Scotland has fallen out of the list of countries worthy of mention in this regard. No figures are given showing the proportion which each nationality contributes to the total population of the city.

In the study of these reports one is more than ever impressed with the fact that tuberculosis must be fought in the homes of the people. Sanatoriums as a factor in treatment are essential, but with a view to the prevention of the disease the supervision of the cases in their homes by qualified, tactful health visitors is the surest method of checking the spread of infection and of obtaining the earliest information of cases which arise amongst contacts.

In this direction the Henry Phipps Institute may be said to be working on lines very similar to those adopted by Dr. Philip in Edinburgh.

## REVIEWS OF BOOKS.

### PULMONARY TUBERCULOSIS. (a)

THIS handsome volume is a noteworthy addition to the literature of tuberculosis. It is comprehensive and practical, and while it will be of interest to all classes in the profession of medicine, it will be of especial value to the general practitioner anxious to keep abreast of modern clinical methods and treatment. The work is divided into six parts, each of which is sub-divided into sections and chapters. This arrangement leads to some slight overlapping, but, on the whole, the continuity of the volume is well maintained. The arrangement of the parts is as follows:—Part I.—Etiology and Pathological Anatomy. Part II.—Symptomatology, and Course, Varieties, and Termination. Part III.—Physical Signs. Part IV.—Diagnosis and Prognosis. Part V.—Complications.

(a) "Pulmonary Tuberculosis and its Complications." By Sherman G. Binney, A.M., M.D., Professor of Medicine, Denver and Gross College of Medicine, Medical Department of the University of Denver, &c. Pp. 778, with plates and photographs. Philadelphia: W. B. Saunders Company. 1908.

### Part VI.—Prophylaxis: General Treatment and Specific Treatment.

The relation of human and bovine bacilli is discussed in the light of recent investigation, and the author urges that there should be "no abatement of the legislative, municipal, and individual measures to suppress the disease amongst domestic animals, and afford protection to the human race." We think that the facts adduced in the text would justify a stronger statement of the pressing need for the control of bovine tubercle by central authority.

"The Channel of Infection" and "The Influence of Race" are dealt with, and the gradual growth of knowledge during recent years, the result of careful and laborious research all over the world, is well exemplified in the pages devoted to the consideration of these subjects.

The last chapters deal with theories of immunity and personal observations upon the use of bacterial vaccines. The experiences of the use of vaccines during a period of a year and a half are given.

The book is well illustrated throughout. Some of the pictures in the chapters on "The Scope of the Sanatorium," and on "The Role of Climate in Treatment," might have been omitted. They show very little, and the volume would be quite large enough without them.

A word of praise must be given to the series of plates of pathological conditions, the work of Mr. Ira D. Cassidy, in which the colours are beautifully produced and wonderfully true.

A copious index renders the book convenient for purposes of reference.

### BACTERIOLOGY. (a)

The excellence of recent editions of well-known English text-books on bacteriology induces an almost hypercritical attitude on the part of a reviewer, so that he judges subsequent volumes with an exalted idea of what a book on the subject should be. Professor Jordan's book, however, is, as might be expected, admirable. It includes much valuable and thoroughly reliable information, and is rendered the more acceptable by the excellence of the illustrations. Not only are "our secret foes," to use a popular phraseology, thoroughly well described, but "our secret friends" come in for a bigger share of attention than they are usually accorded. Among the economic bacteria we may mention that those concerned in the "nitrogen cycle" are very fully discussed. We think that disinfection has scarcely received the consideration that it merits, but otherwise we regard the book as eminently satisfactory.

### LECTURES ON DISEASES OF CHILDREN. (b)

THIS work is a compilation in book form of a series of lectures delivered by the author at the London Hospital. It contains 24 lectures, five of which have been added since the first edition appeared, dealing with the common diseases of childhood. The book is eminently practical from cover to cover, and could only have been written by one who is in constant touch with the subject of which he is treating. We agree with him that the style is in places "rather colloquial in character"—in fact, we would go further and say very colloquial and very dogmatic. But these are, of course, the attributes of a good lecture. The book is, moreover, very readable—in fact, so much so, that one catches oneself accepting as true conclusions which, on second thoughts, prove to be very debatable. It is in no sense a text-book, and often touches only the fringe of the subject, but it embodies thoroughly good teaching as far as it goes. It should continue to be of great help as an introduction to the study of children's diseases, for each chapter contains valuable matter, clearly stated. The numerous illustrations are nearly all reproductions of photographs of the author's cases, and are particularly good.

(a) "A Text-Book of General Bacteriology." By Edwin O. Jordan, Ph.D., Professor of Bacteriology in the University of Chicago and in Rush Medical College. Pp. 557, with 163 illustrations. Philadelphia: W. B. Saunders Company. 1908.

(b) "Lectures on Diseases of Children." By Robert Hutchison, M.D., F.R.C.P. Second Edition. London: Edwin Arnold. 1909.



## SUMMARY OF RECENT MEDICAL LITERATURE, ENGLISH AND FOREIGN.

*Specially compiled for THE MEDICAL PRESS AND CIRCULAR.*

**Ascites in Cirrhosis of the Liver Cured by Tapping.**—Patterson (*Amer. Journ. Med. Sciences*, May, 1909) records one of those very rare cases in which repeated tapping appears to have exercised a curative effect on ascites due to pure cirrhosis of the liver. Ever since the publication in 1893 of Hale White's paper on the subject, it has been recognised that the supervention of ascites is to be looked on as a terminal symptom in cirrhosis of the liver. Cases of cure of the ascites have been recorded, but they are of great rarity. Patterson's patient, a male, æt. 58, came under observation on October 9th, 1907, giving a history that six months previously he had noticed some swelling of his feet, and two months later enlargement of his abdomen. He had been drinking heavily for some time. Within a month the abdomen became so large that paracentesis became necessary, and 5½ gallons of fluid were withdrawn. A month later a second tapping was necessary, and 4½ gallons were removed. During the following four months the patient was tapped some six times, large quantities of fluid being withdrawn each time. Within a year the patient felt perfectly well, and had returned to work. He had grown fat, and was very active, and though he had returned to his excessive drinking, there were no signs of fluid in the abdomen. On March 17th, 1909, the patient died, having had symptoms of intestinal obstruction for one week, probably due to the strangulation of an umbilical hernia. On post-mortem examination about a quart of fluid was found in the peritoneal cavity, probably due to the condition from which he died. "The transverse mesocolon was adherent to the abdominal wall from the ensiform cartilage to the ninth right cartilage, and to the liver below and to the right of that point. The adhesions were not dense, nor highly vascularised. The liver was adherent to the diaphragm by a few readily broken adhesions, was greatly diminished in size, and showed the lesions of advanced cirrhosis. There was no perihepatitis. The peritoneum, as far as could be seen, showed no evidence of acute or chronic inflammation." K.

**The Relation of Gout to Granular Kidney and Lead Poisoning.**—West (*Practitioner*, July, 1909), though admitting that there often exists a close association between these conditions, doubts that there exists any causal relationship. Granular kidney is a fairly common disease, but it is by no means necessarily associated with either gout or lead poisoning. When it is, it is possible that, as a result of the renal inadequacy, the elimination, in the one case of the lead, and in the other of the uric acid, may be interfered with. Both gout and lead may each produce chronic changes in the kidney, but neither causes granular kidney. The presence, however, of granular kidney greatly increases the liability of the patient to gout, on the one hand, and to lead poisoning on the other, or to both together, and in each affection alike greatly increases the gravity and risk. K.

**Pulmonary Regurgitation.**—Drummond (*Med. Chronicle*, June, 1909) records a case of this very rare condition. The patient, a man, æt. 47, was admitted to hospital complaining of vertigo and headaches, shortness of breath on exertion, and pain referred to the precordial region. On examination the area of cardiac dulness extended well to the right of the sternum, where an impulse could be seen and felt. The left apex beat was in the sixth interspace, an inch and a half outside the mammary line. The veins of the neck were prominent, and presented a well-marked diastolic impulse. Loud "to and fro" murmurs could be heard at the base of the heart. The diastolic murmur was conducted down the left border of the sternum, but was well heard also at the right border. This

murmur appeared to replace completely the second sound at the base of the heart. Over the carotid artery blowing systolic and diastolic murmurs could be heard, but no second sound. The patient died about five weeks after admission to hospital. At the post-mortem examination the following changes were found:—"Both ventricles were greatly dilated, but the right particularly, the muscular wall of which was  $\frac{3}{4}$  of an inch in thickness. The edges of the aortic valve were thick and rounded, and the ascending aorta was expanded into a fusiform dilatation, whilst the inner coat of the vessel was patchy and scabrous, the result, apparently, of syphilitic sclerotic mischief. When tested with water, the pulmonary valves were found to leak. They were thin and membranous except at the adjacent edges of the left anterior and posterior cusps, which were united by a short fibrous band. They were also adherent for a short distance to the wall of the pulmonary artery close to the point at which they meet." K.

**The Modern Treatment of Fractures.**—Lucas-Championnière (*Brit. Med. Journ.*, June 12th, 1909) states that he has made mobilisation a leading principle in the treatment of fractures, and the success of the treatment has been due to very numerous clinical observations which have demonstrated the truth of the principle. The author considers that mobilisation to a great extent replaces the necessity of immediate suture of bones, and is certain that the more the method of mobilisation is developed, the fewer will be the occasions in which immediate suture will be performed. He has never had occasion to suture a recent fractured olecranon, because perfect recovery is obtained within a fortnight without operation, when properly treated by his method. Radiography has shown that, in spite of faulty position, and in spite of a certain degree of persistent over-riding, the function of a limb again becomes perfect. The object in treatment must not, therefore, be ideal juxtaposition. Every movement which is not injurious, by reason of its amplitude favours repair of bones, and is not less necessary to the vitality of the joints, muscles, ligaments, and tendons. Massage affords the best form of movement, but all such treatment should relieve and not cause pain. The reduction of a fracture is only a relative necessity, and in a large number of cases the manœuvre of reduction is useless. After massage the fracture is either spontaneously reduced, as in the case of the olecranon, or is very easy to maintain reduced, as in the case of the clavicle or malleolus. Massage should be used sparingly in children to avoid excessive callus formation. In general mobilisation from the beginning, within the first twenty-four to forty-eight hours, is of capital importance, and passive or induced movements are the best in the commencement. Active or spontaneous movements ought to be measured and directed by the surgeon, as by the author's method of treatment pain caused by movement disappears from the beginning, and therefore does not limit the untimely action of voluntary movement. The pain experienced and the degree of sensitiveness of the callus are the best guides in directing and in permitting movements by the patient. S.

**A Case of Volkman's Ischæmic Paralysis of both Forearms.**—Coullie (*Indian Med. Gaz.*, April, 1909) reports that a boy of 13 was brought to hospital suffering from the above condition. Six weeks previously he had fallen from a tree, and fractured both bones of either forearm about the middle of the shaft. Soon after the accident the arms were put in bamboo splints by the hospital assistant of a native state. The

splints were not disturbed for three weeks, and were then removed, owing to the occurrence of suppuration beneath them. The fractures had united, but the skin had necrosed in two places on either forearm. Under treatment the sores healed, but both arms presented a typical picture of Volkmann's ischæmic paralysis. The muscles were wasted. The finger-nails were poorly nourished and round, and some of them ulcerated. The wrist and fingers were semi-flexed, and prehensile power was feeble. The hand had a claw-like appearance, the extension of the fingers being prevented by shortness of the flexor tendons. Operation was advised, but refused by the parents. S.

**Adeno-Sarcoma in the Newly-born.**—De Villiers (*Transvaal Med. Journ.*, March, 1909) reports a case of tumour in the right parotid region which was present at birth, and had attained the size of a pigeon's egg in ten days. When the child was twenty-eight days old the writer was partially successful in removing the growth. The tumour was black in colour, and very friable. A similar dark, hard lump was found between the shoulder and the elbow. One month later the tumour had recurred. It had then spread so much that it nearly closed the right eye, greatly interfered with deglutition, and the mouth could hardly be opened. Microscopic examination showed the tumour to be an adeno-sarcoma. S.

**Septic Thrombosis (Puerperal) of the Pelvic Vessels.**—Bell (*Journ. of Obst. and Gyn. Brit. Emp.*, XV., 6) reports a case in which the thrombosed vessels were removed. On the twelfth day after confinement the patient's temperature was  $103.5^{\circ}$ , and pulse 130. Her appearance was bad; she looked very yellow, and seemed drowsy; she could, however, answer all questions. On examination there was no free fluid to be detected in the abdomen, nor any tenderness. The whole abdomen moved with respiration. The uterus was enlarged, and extended well above the pubes; it was not tender. *Per rectum*, some thickening high up on the right side could be felt; there were no thrombosed vessels felt in the lower part of the broad ligament. The cervix was dilated, and a gush of sanguineo-purulent fluid came from the uterine cavity, which showed a Gram positive diplococcus, but was sterile on culture, probably owing to lysol douche given three days previously. The patient's condition improved next day, but on the 14th relapsed, and on the 15th the temperature was  $104^{\circ}$ , pulse very rapid and weak. It was then decided to open the abdomen. The ovarian vessels on the right side were found thrombosed and forming a well-defined mass the size and shape of a banana. The peritoneum was split and the mass followed to the meso-colon; here it seemed to end, and the whole mass was ligated and excised, and the peritoneum closed. There was no thrombosis of the iliac veins. On the left side there was limited thrombosis of the ovarian vein. This was also excised. After the operation continuous saline was infused subcutaneously; the temperature fell to  $101^{\circ}$ , but, following a rigor, rose to  $106.6^{\circ}$ , when the patient died. Pathological report: Peritoneal fluid sterile; pus from right ovarian vein showed diplococci same as from uterus; sections of vessel further from uterus showed laminated thrombi, with a few leucocytes; left ovarian vein thrombosed, but seemed aseptic. Post-mortem: The right ovarian vein thrombosed to junction with vena cava; some veins thrombosed in uterine wall; interior of uterus apparently healthy. In conclusion, the writer says, it is not easy to make the diagnosis, and if it can be made, how far is it justifiable to say the patient will die if not operated upon? With regard to the latter, no one will deny that most of these cases do die, and therefore early operation must be aimed at, even though the patient is not dying at the time. He considers the delay owing to finding pus in the uterine cavity was prejudicial to this case. F.

THERE were 174 deaths from bubonic plague and thirty-six from cholera in Amoy during the fortnight ending on Monday.

## MEDICAL NEWS IN BRIEF.

### Medico-Legal Society.

At the annual dinner of this society, which was held last Thursday at the Holborn Restaurant, Mr. Justice Walton, President, in the chair, Sir William Collins proposed "The Law and Medicine." He said that no one could study the legislation of recent times without seeing what a large area of common territory there was in which law might be ancillary to medicine and medicine to law. The discussions which took place on the Prevention of Crimes Bill showed how necessary it was to have both legal and medical opinion in the House of Commons. The Master of the Rolls, in reply, acknowledged the constant indebtedness of Bench and Bar to the medical profession. Modern legislation, he said, tended more and more to wrap up medical and legal problems in single Acts of Parliament. Mr. H. T. Butlin (President of the Royal College of Surgeons) responded for the medical profession, and proposed prosperity to the society, which he described as one of the most important organisations formed in recent years. The President, in response, alluded to the wide possibilities of extension of their work and to the utility of their proceedings, not only to the members of the two professions but to the public at large.

### The Metropolitan Asylums Board—Annual Report.

DURING the financial year ended at Michaelmas, 1908, the net expenditure was £1,121,942, being a decrease of £13,841, as compared with the previous year, although the average daily number of inmates maintained was 485 in excess of the previous year.

Although the large number of fever and diphtheria patients under treatment in the hospitals during the spring of the year caused some apprehension, the maximum number under treatment (which was reached on November 30) was 1,856 below the highest number reached during 1907; in that year the number of patients surpassed all previous records, as many as 7,158 cases having been at one time under treatment in the board's fever hospitals. The total number of patients admitted into those hospitals during 1908 was 27,967, as compared with 32,169 in the previous year; 27,981 patients had been discharged from those institutions, and there had been 1,255 deaths, as compared with 1,405 in 1907. The mortality per cent. was:—Scarlet fever, 2.56; diphtheria, 9.73; enteric, 16.28; cerebro-spinal meningitis, 40.00; other diseases, 5.68. The average duration of residence of the patients in the hospitals was again on the increase. Not a single case of small-pox was admitted into the board's hospitals from the metropolis, though one case was received from Leyton. The cases of mistaken diagnosis (other diseases) admitted numbered 2,594, the percentage of error among cases certified as scarlet fever being 6.1, among diphtheria cases 22.2, and among enteric fever cases 39.1.

The total number of removals effected by the board's ambulances during the year was 59,870, of which number 1,291 were medical and surgical cases of a non-infectious character. The total number of journeys made by the ambulances was 34,260, the distances covered aggregating 421,594 miles. With the exception of the year 1907, the number of removals effected and the miles run was in each case greater than during any previous year of the board's history, and it was noted "that the record of entire freedom of the service from accident involving injury to any patient remains unbroken."

### The Travel and Sports Exhibition, London.

THE recent Travel, Sports, Pastimes and Tropical Exhibition at Olympia, London, was of a most interesting nature. The collection of hunting trophies was especially fine, and included heads, horns, stuffed beasts, birds, and so on, lent by General Baden-Powell, Major Radcliffe, and others. The Boy Scouts had a camp in one part of the building. Amongst other things was a fine show of aerial machines and models of motor boats and sporting tents. An attractive feature was an interesting exhibit by Messrs. Burroughes Wellcome. Many of their products are

particularly suited for the requirements of sportsmen and travellers, and there is little need to dwell upon the portability and other desirable qualities of tabloid drugs and compressed bandages and other appliances. One of this enterprising firm's most interesting exhibits was the collection of old and battered medicine chests from the Stanley and various other famous African expeditions. Travel-worn, yet efficient, they stand as silent witnesses to the masterful yet enterprising spirit which adapts modern science to the wants of the explorer of the remotest corners of the earth, and carries our most familiar remedies into the heart of savage countries.

#### International Congress on Alcoholism.

THE 12th International Congress on Alcoholism opened in London on the 19th inst. The International Permanent Committee met at 10 a.m. in Kensington Town Hall, and was joined later by the British executive. At 11.30, in the same place, the Congress held its first general meeting. The Dean of Hereford, Chairman of the Conveners' Committee, introduced Lord Weardale, the acting President, who delivered the address of welcome. At 5 p.m. an exhibition was opened in the north gallery; and at 9.30 the delegates, including the Crown Prince of Sweden, were received by Mr. Lewis Harcourt, M.P., First Commissioner of Works, on behalf of the Government.

The exhibition, which is open daily from 10 to 6 during the Congress, consists of two sections. The first is composed largely of literature, scientific and popular books, pamphlets, posters, anatomical and statistical diagrams, pictorial post-cards, and other publications used in the anti-alcohol campaigns of many countries, the regalia and banners of various temperance organisations, with challenge shields, badges, medals, and other paraphernalia used chiefly in temperance work among the young. The exhibitors in this section are very numerous, including not only organisations whose names are familiar in this country, but many in other lands. The other section of the exhibition is dietetic, and includes a model kitchen, a hand-cart of the Church of England Temperance Society, non-alcoholic wines, and other beverages.

#### The Sudlow Gold Medal.

MR. H. S. WELLCOME, principal of the well-known firm of Burroughs Wellcome and Co., was present at an interesting gathering last week of about fifteen hundred employees, in the grounds of the Dartford manufactory, when replicas in gold of the Sudlow Medal were awarded and presented by him to Dr. F. B. Power, director of the Wellcome Chemical research laboratories; Dr. Dale, director of the Wellcome physiological laboratories; Mr. J. C. Smith, and Mr. Linstead. A cordial note characterised the proceedings, as evidencing the mutual esteem held by employer and employed.

#### Royal College of Surgeons in Ireland—Prize List.

LIST of successful candidates for the Summer Session, 1909:—

Barker Anatomical Prize.—£26 5s., H. R. Tighe; Special Prize, £21, J. S. Pegum.

Carmichael Scholarship.—£15, J. T. Duncan.

Gold Medal in Operative Surgery.—Miss I. M. Clarke; Silver Medal, F. N. Harvey.

Stoney Memorial Gold Medal in Anatomy.—J. T. Duncan.

Practical Histology.—S. Griffin, First Prize (£2) and Medal; I. M. Swanepoel, Second Prize (£1) and Certificate.

Practical Chemistry.—N. A. Sheridan, First Prize (£2) and Medal; G. N. Smyth, Second Prize (£1) and Certificate.

Public Health and Forensic Medicine.—J. T. Duncan, First Prize (£2) and Medal; K. L. O'Sullivan, Second Prize (£1) and Certificate.

Materia Medica.—J. T. Duncan, First Prize (£2) and Medal; Vincent J. White, Second Prize (£1) and Certificate.

Biology.—J. D. Cherry and J. C. Sproule (equal), First Prize (£2) and Medal, each.

The lectures and practical courses of the Winter Session will commence October 15th.

#### Trinity College, Dublin.

THE following candidates passed the Preliminary Scientific Examination, Trinity Term, 1909:—

Physics and Chemistry.—Edward S. Johnson, William H. R. McCarter, Joseph S. English, William D. Pile, Blacker C. Powell, Hedley Boyers, James A. Small, Henry B. S. Dixon, Henry V. Fitzgerald, John G. Butt, Richard A. Stewart, Ernest Bantry-White, Albert W. D. Magee, William J. Merrick, George B. Hadden, Cedric C. Mecredy, William F. Evans, Reginald O. Smyth, Charles P. Kelly, David H. Hadden, Edward G. Fishe, Thomas J. Kelly, Michael Ryan, Herbert R. Ford.

Botany and Zoology.—Edward P. Vickery, David H. Hadden, Frederick G. Flood, John W. C. Stubbs, Frederick Harris, and William J. Merrick, passed on high marks; Theodore Allen; John G. Butt, Robert L. Vance, Dorothy E. Webb, Henry G. J. Rutherford, Eleanor Taylor, Trevor A. Lawder, Joseph C. A. McCalden, Joseph P. Quinn, James A. Small, Arthur N. Brady, John D. Oliver, Wm. F. Gibson, Francis A. Roddy, William E. Tyndall, Rupert C. Lowe, Reginald H. Jones, Archibald R. Toomey, Francis A. L'Eestange, William R. L. Waters, George A. Bridge, William D. Pile, Henry J. Brown, Edmund S. Hatte, Charles O'Reilly, George Buchanan, Henry C. D. Miller, Joseph A. Quin, Etienne J. Malherbe.

The following candidates passed the Intermediate Medical Examination (Part II.).—Arthur Chance, Maurice S. Moore, Patrick F. Munan, William Frier, Hugh E. Williams, Samuel A. Lane, Thomas W. E. Henry, Frederick Burke, Cecil Rutherford.

The following passed the Final Medical Examination (Part II.).—Midwifery: Beatrice M. Hamilton, Hilgard Müller, and Eric J. Powell, passed on high marks; Adams A. McConnell, Arthur C. Hallows, Marius A. Diemont, Benjamin A. Molyneux, David Duff, George E. Craig, William H. Hart, John W. Flood, Charles H. Denham.

The following candidates passed the Previous Dental Examination.—Physics and Chemistry: George G. Yeates. Materia Medica: Kenneth C. M'Naught Henry Kirk.

#### Conjoint Examinations in Ireland.

THE following candidates have passed the Second Professional Examination of the Royal College of Physicians and the Royal College of Surgeons, July, 1909:—

M. J. Hillery (with Honours), T. P. H. Roberts (with Honours), T. T. Buckley, N. S. Deane, H. J. Cotter, S. Griffin, R. Henry, W. H. Johnston, H. K. Kevin, R. Kenefick, T. Kennedy, J. Kearney, A. McGrath, F. J. McCarthy, M. Meehan, T. Mulcahy, J. C. O'Farrell, W. R. O'Keeffe, J. C. Ryan, I. M. Swanepoel, J. Walsh, V. J. White.

#### Institute of Chemistry.

In the June-July examinations, of 29 candidates who presented themselves for the intermediate examination the following 17 passed:—W. Caw, A. P. Clark, R. L. Collett, B.A. (Cantab.), W. Dickson, S. Elliott, R. H. Ellis, N. Evers, J. E. Hackford, A. D. Heywood, F. E. Laughton, J. R. Nicholls, W. M. Paulley, B.A. (Cantab.), G. C. Petrie, E. F. Pollock, S. Robertson, T. Schwarz, and J. A. L. Sutcliffe. One candidate presented himself for a general examination for the associateship, and passed—L. Knight, A.R.S.M. Six candidates presented themselves for the final associateship examination in the branch of mineral chemistry, and four passed:—H. L. Allen, B.Sc. (St. Andrews), R. H. Findlater, R. Gawler, B.Sc. (Leeds), and G. A. Smiley, B.Sc. (Lond.). In the branch of metallurgical chemistry, of five examined three passed:—A. Marcan, A. Marks, A.R.C.Sc. (Lond.), and A. W. Schultz, A.C.G.I. Of seven candidates who presented themselves in the branch of organic chemistry the following three passed:—R. Boyd, B.Sc. (Glas.), C. S. Garland, B.Sc. (Lond.), A.R.C.Sc. (Lond.), and J. Young. In the examination in the chemistry of food and drugs and of water, of nine who presented themselves five passed:—F. S. Aumonier, W. G. Carey, R. D. Carty, A.R.C.Sc.I., T. R. Greenough, B.A. (Cantab.), and C. E. Sage. One of the candidates, C. E. Sage, was examined for the fellowship.

## NOTICES TO CORRESPONDENTS, &c.

CORRESPONDENTS requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

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CONTRIBUTORS are kindly requested to send their communications, if resident in England or the Colonies, to the Editor at the London office; if resident in Ireland to the Dublin office, in order to save time in reforwarding from office to office. When sending subscriptions the same rule applies as to office; these should be addressed to the Publisher.

M.O.H. (Scotland).—In the recently-issued report for the year 1908 by the Medical Officer of Health for the City of Liverpool, you will find some interesting photographs of country cowsheds whence tuberculous milk was sent into the city. Dr. Hope has done excellent work in the direction of supplying Liverpool with pure milk. His report is in many ways interesting, and will repay perusal by those engaged in public health work.

MR. F. S.—We think there exists no cause for anxiety on your part; on the contrary the annual statement you enclosed, seems to be a very straightforward, business-like announcement, which should encourage rather than adversely affect shareholders. The scare that Apollinaris was made and bottled in London, could only have been caused by rival interests, and may be dismissed as a disreputable trick from your mind.

H. B.—In laying down rat poison, it should be remembered that rats may carry the poisoned food far away from the original spot. Cases are on record, where dogs, cats, fowls, and even children have been poisoned by eating bacon and other baits that have been thus thrown in their way. The best plan is undoubtedly the Danyss or similar bacterial poison; but experience has shown it is not without risk, when used too near human dwellings.

R. F. NIBBETT (Surbiton).—The London Fever Hospital can be recommended under the circumstances you mention. It is intended specially for infectious patients who can pay a small fee. The Secretary's address, is Major W. Christie, Liverpool Road, London, N.

CIVIL SURGEON. (Lahore).—The lactate of mercury has been advocated as an antisyphilitic, on account of its safety and solubility. It is given in doses of one-fourth grain in fifteen minims of water, hypodermically, or one-fifth grain freely diluted by the mouth.

DR. H. J. C. (Brighton).—Any doubt as to the diagnosis should be rapidly cleared up by the administration of mercury. The only possible confusion, so far as can be judged from your letter, lies between an ulcerating syphilide and an epithelioma. The chief points in the former are the age of patient, tendency to heal in centre and spread peripherally, presence of other specific manifestations, together with rapid course and non-induration.

## Meetings of the Societies, Lectures, &c.

WEDNESDAY, JULY 21ST.

MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22 Chenies Street, W.C.).—4 p.m.: Mr. Cecil H. Leat: Clinique (Surgical).

THURSDAY, JULY 22ND.

MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22 Chenies Street, W.C.).—4 p.m.: Sir Jonathan Hutchinson: Clinique (Surgical). 5.15 p.m.: Mr. Arthur Edmunds: "Chemical Antiseptics in Modern Surgery."

FRIDAY, JULY 23RD.

MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22 Chenies Street, W.C.).—College closes for Vacation.

CENTRAL LONDON THROAT AND EAR HOSPITAL (Gray's Inn Road, W.C.).—3.45 p.m.: Lecture: Mr. W. Wallis: Mouth and Teeth.

## Appointments.

CLARKE, N. D., Dental House Surgeon at Guy's Hospital.  
DORRIS, J. R., L.R.C.Lond., M.R.C.S., Assistant Medical Officer to the Royal Hamadryad Seamen's Hospital, Cardiff.  
EDWARDS, J. C., L.R.C.P. and S.Edin., District Medical Officer by the Merthyr Tydvil (Glamorganshire) Board of Guardians.

EMERSON, HERBERT BREE, L.R.C.P.Lond., M.R.C.S., District Medical Officer of Pershore (Worcestershire).  
GARRETT, R. R., L.R.C.P.Lond., M.R.C.S., Certifying Surgeon under the Factory and Workshop Act for the Bishopstoke District of the county of Hants.  
LITHGOW, J., M.D., C.M.Glasg., Certifying Surgeon under the Factory and Workshop Act for the Cleland District of the county of Lanark.  
MULCAHY, P., L.R.C.S.Irel., L.R.C.P.Edin., Certifying Surgeon under the Factory and Workshop Act for the Ballinamore District of the county of Leitrim.  
PIM, ARTHUR AUGUSTUS, F.R.C.S.Edin., L.R.C.P.Edin., L.F.P.S.Glasg., District Medical Officer by the Beaminster (Dorset) Board of Guardians.  
RICE, R. S., M.D.Irel., District Medical Officer by the Merthyr Tydvil (Glamorganshire) Board of Guardians.  
SMITH, THOMAS EDWARD, M.D., B.Ch.Dub., Medical Officer to Kelly College, Tavistock (Devon).  
SPAIN, H. G., Dental House Surgeon at Guy's Hospital.  
STUART, J. H. W., Dental House Surgeon at Guy's Hospital.  
WABNER, H. F., M.B., B.S.Lond., Certifying Surgeon under the Factory and Workshop Act for the Fakenham District of the county of Norfolk.  
WHITE, J., M.R.C.P.Irel., M.R.C.S.Irel., Certifying Surgeon under the Factory and Workshop Act for the Tullaroan District of the county of Kilkenny.  
WILLIAMS, L. A., M.D.Edin., D.P.H.Liverp., Medical Superintendent to the Bradford Educational Authority.

## Vacancies.

Lurgan Union.—Female Resident Medical Officer. Salary £80 per annum, furnished apartments and rations. Applications to James Calvert, Clerk of Union. (See advt.)  
Royal City of Dublin Hospital.—Anaesthetist Pathologist, x-Rayist and Dentist. Applications to the Hon. Sec., Medical Board. (See advt.)  
Tynemouth Victoria Jubilee Infirmary, Spring Gardens, North Shields.—House Surgeon. Salary £100 per annum, with rooms, board, etc. Applications to Mr. John W. Meadows, Secretary, 43, Howard Street, North Shields.  
Worcester County and City Asylum, Powick.—Third Assistant Medical Officer. Salary £140 per annum, all found. Applications to the Superintendent.  
St. George's Union, London.—Second Assistant Medical Officer. Salary £120 per annum, with board, residence, and washing. Applications to the Medical Superintendent.  
Derbyshire County Council.—Assistant Bacteriologist. Salary £150 a year. Applications to Sidney Barwise, County Medical Officer of Health, County Offices, Derby.  
Royal South Hants and Southampton Hospital.—House Physician. Salary £100 per annum, with rooms, board, and washing. Applications to T. A. Fisher-Hall, Secretary.  
Sunderland and Durham County Eye Infirmary, Sunderland.—House Surgeon. Salary £210 per annum. Applications to J. F. Potts, Secretary, Sunderland and Durham County Eye Infirmary, Stockton Road, Sunderland.  
Berks County Asylum, Wallingford.—Second Assistant Medical Officer. Salary £150 per annum, with board, furnished apartments, attendance, etc. Applications to Medical Superintendent.  
Cameron Hospital, West Hartlepool.—House Surgeon. Salary £100 per annum, with board, rooms, and laundry. Applications to J. G. Taylor, Secretary.  
Govan Parish School Board.—Principal Medical Officer. Salary £500 per annum. Applications to Mr. M. MacLeod, Clerk to the Board, 151 Bath Street, Glasgow.  
Glasgow District Mental Hospital.—Junior Assistant Medical Officer. Salary £125 per annum, with board, lodging, etc. Applications to Dr. Marr, Medical Superintendent.

## Births.

MCNABB.—On July 18th, the wife of Fleet-Surgeon D. McNabb, Royal Marine Depot, Walmer, of a son.  
NEWMAN.—On July 15th, at Windhill, Bishop's Stortford, the wife of J. C. Newman, F.R.C.S., of a daughter.  
SMITH.—On July 14th, at Cleveleys, 3 Redbourne Avenue, Church End, Finchley, the wife of Thomas Smith, M.R.C.S., L.R.C.P., of a son.  
WILSON.—On July 15th, at Ongar House, Chipping Ongar, the wife of Geoffrey R. Wilson, M.A., M.B., of a son.

## Marriages.

BIGGS—JEFFERISS.—On July 17th, at St. Mary's, Stanstead, Lewis Biggs, of "Greenfield," Meopham, to Alice Violet, second daughter of W. R. S. Jefferiss, M.D., 4 New Road Avenue, Chatham.  
MARTIN—DENNEY.—On July 14th, at St. John's, Bromley, by the Rev. Canon Barker, Robert Henry Martin, M.B., Sudbury, Harrow, son of S. Edgar Martin, M.A., M.D., Newry, Ireland, to Agnes, fourth daughter of M. J. Denney, Esq., Stoneleigh, Brounley, Kent.

## Deaths.

BROWN.—On July 14th, at the Edinburgh Hydropathic, Craiglockhart, William Brown, F.R.C.S.E., Consulting Medical Officer of Health for the city of Carlisle.  
HUTCHINSON.—On July 12th, at 7 Pittville Lawn, Cheltenham, Sarah Burns Hutchinson, widow of Berkeley Westropp Hutchinson, M.D., and grand-daughter of Robert Burns, aged 87 years.

# THE MEDICAL PRESS AND CIRCULAR.

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No. 4.

## NOTES AND COMMENTS.

IN our correspondence columns **A Membership Diploma for the Association of Medical Diplomates of Scotch Colleges.** land, addressed to the Edinburgh College of Surgeons. It reminds the Council of that ancient Corporation of a petition addressed to them in 1905 praying them to take steps towards the institution of a diploma of membership, in addition to the existing qualifications of Licentiate and of Fellow, R.C.S.Ed. Their ground for this request is clear enough. The ordinary qualification of the English College is that of member, while that of the Scotch College is that of licentiate, and holders of the latter diploma are placed at a serious social and professional disadvantage when engaged in practice outside Scotland. Some years ago it was suggested in the columns of *THE MEDICAL PRESS AND CIRCULAR* (July 14th, 1905), that for the cumbrous conjoint qualification, L.R.C.S. & P.Ed. and L.F.P.S.Glasg., should be substituted the far more dignified M.R.C.S., L.R.C.P.Scot. Moreover, the title would be on all fours with the conjoint English qualification. If the Association of Medical Diplomates of Scotland prevail on the Council of the Edinburgh College and the Glasgow Faculty to adopt this common-sense suggestion, they should earn the lasting gratitude of the many holders of the Edinburgh and conjoint Scotch qualifications who are scattered throughout the world.

**If Not,  
Why Not?**

THE weight of argument appears to be all on the side of the Association. The College of Surgeons has been in existence for some four hundred years, and is now asked to take a step that would be not only extremely popular amongst its licentiates in all parts of the world, but would add considerably to its revenue, for it is to be presumed that fees would be charged for the new title. Nor would the suggested change throw any very great strain upon the constitution of the College. Charters are capable of amendment and extension without ruinous expenditure of time and money. We cannot help feeling that the College of Surgeons of Edinburgh, if unable to fall in line with the suggestion of a membership diploma, should at least state clearly the grounds for refusal. Another point is that the negotiations show incidentally the usefulness of a body like that of the Association of Scotch Medical Diplomates. It is only by the existence and the efforts of such an organisation that any collective expression of opinion and any united protection and advancement of interests can be secured. Reform is always a slow matter, and those who join a society of this nature have often to be content with the knowledge

that they are sowing good seed. Meanwhile, all holders of a Scotch diploma would do well to join the Association that has been founded in their interest. Another piece of extremely good work performed by the Association during the past year has been the bringing forward of the practical monopoly of the more important hospital appointments in England and Wales by holders of the higher English qualifications. Some strong meetings of protest were held in the spring in conjunction with the Irish Graduates' and Medical Schools Association.

**Injury by  
Shampoo—**

WHATEVER else the Workmen's Compensation Act, 1906, may or may not have done, it has made medical men pay far more attention to the ætiology of disease than they have ever done before. A light-hearted House of Commons finds it easy enough to pass a Bill for the compensation of workmen who sustain injury in their employment, and with that principle, we fancy, few will be found to quarrel; but when matters of fact come to be tested by the light of medical science, it can only be said that it is far easier to form theories than to establish them. The stuff that passes in law courts for evidence is emphatically not of the substance or weight which scientific men demand as proof when questions of significance in their own domain come up for decision. It may be a valuable habit, but from the point of view of airy theorists it is an awkward habit, which scientific men acquire of not considering a matter proved, so that further progress in the same line is warranted, unless the facts alleged in evidence are not compatible with any other reasonable theory. We can hardly, however, blame judges, whose notions of evidence consist in the assertions and counter-assertions before them, if their training leads them to consider a fact "proved" when there has been a larger and more voluble assertion of belief in its favour than against it. Some judges not only do not seek scientific proof, but regard the most extravagant theories as seriously as they would an indictment for murder.

**And  
Compensation.**

SOME other judges, however, preserve a reasonable equilibrium, which is as much as can be expected of men of legal training who are unaccustomed to deal with science and scientific matters. Before these judges, sitting as arbitrators under the Workmen's Compensation Act, justice is meted out with a certain approach to accuracy, but the margin which is left for the successful establishment of some wild claim is still a large one. A case which came up in the City of London Court last week for re-opening had been decided last December, when the workman,



a hairdresser, claimed that he had cut his hand with scissors, and subsequently "poisoned" the wound with a spirit lotion he used for shampooing. To these "accidents" he attributed eczematous ulceration of his hands, but the Court decided against him. There are a good many judges who would have done otherwise, but with however much sympathy one may regard a disabled workman, it is hardly possible to entertain such a proposition as that put forward in the light of what is known in medicine. It is equally, or almost equally, impossible to deny it, simply because no one can say, in many cases, why certain persons idiosyncratically develop eczema of the hands. This case, which seemed a trivial one to start with, has since assumed a more serious aspect, as it was stated in evidence that the man had been to several hospitals and seven or eight doctors, none of whom could do anything effective for him, and the trouble is likely to remain for years. The judge, however, refused the application to re-open, as he was bound to do, but without costs. This is a sample of the type of case which has to be decided every day under the Act, and it shows the danger of legislation going in front of science, instead of following in its well-beaten paths.

**Aneurism  
an  
Accident.** A FURTHER example of the fatuous position which the law has reached in relation to accidents, was given by a decision rendered in the Court of Appeal, last week, in *Hughes v.*

*Clover, Clayton and Co.* The appeal was made by the Company against a decision of the County Court judge of Lancaster, sitting as an arbitrator under the Workmen's Compensation Act. The workman in this case had a large aortic aneurism, which was liable to burst at any moment, and whilst tightening a nut with a spanner, but not using more than ordinary force in doing so, rupture took place and he fell dead. These were the facts found, and on them the judge held that death had taken place from accident within the meaning of the Act, and awarded compensation accordingly. The Court dismissed the appeal of the employers, holding that the county judge had decided rightly. They held that the man, admittedly suffering from an aneurism, had incurred a strain, of a not extraordinary character, in the course of his work, and that this strain caused the rupture of the aneurism; therefore they found that the case came within the law as laid down by recent decisions, and that therefore the workmen's dependants must recover. We do not dispute that, as the law has developed lately, this decision stands good, but we do think that this development of the law is an outrage on common sense.

**Is Work  
an  
Accident?** THE workman was performing a very ordinary task, requiring no undue exhibition of force, and he died of a rupture of an aneurism, which was merely the extension of a pathological process which had been going on for months, probably for years. It is as ridiculous to say that it is an "accident" to tighten a nut, which the man deliberately set himself to do, and did in the ordinary way, as it would be to say that walking or sitting up in bed was accident if rupture had occurred whilst he was performing either of these actions. If ever a man dies of a disease-process he does so when he dies of rupture of an aneurism, and only by a gross distortion of the English language can he be said to die of anything else. We do not think it is possible, in the present state of medical knowledge, to say what

share, if any, external circumstances take in hastening a rupture which is bound to come. For instance, had the man walked rapidly to his work, and the rupture taken place when he was doing so, bleeding would have begun before he started tightening the nuts at all, and it must be almost impossible to say in any given case whether bleeding had been going on gradually for half an hour, or whether a sudden rent occurred in the sac. In other words, it is impossible to say in such a case that anything in the man's employment had any connection with the rupture, whilst the large outstanding factor remains that, whatever he had been doing, the continuation of his life was only a matter of days or hours. From the point of view of workmen, these decisions, like all departures from the bed-rock of scientific knowledge and common-sense, are disastrous, for they simply drive employers to have their men medically examined, and in a short time no man with a defect of any kind will be able to obtain work in any capacity, owing to the employers' fear of having to pay compensation on a heavy scale for any trivial event that affects their health.

## LEADING ARTICLES.

### OPHTHALMIA NEONATORUM.

THE progress of reform in preventive medicine—all the world knows—is proverbially slow. This general principle has been forcibly illustrated of late years in the case of the most preventable of all diseases, ophthalmia neonatorum. As a cause of blindness it stands foremost; its cause is definitely a specific infection, of which by far the most common is that by the gonococcus. The second vital fact in the problem is that the infection is conveyed from mother to infant at or shortly after birth. By the use of certain aseptic or antiseptic measures employed about the period named the disease can be averted in ninety-nine cases out of a hundred. From this simple statement of fact it must be open to the apprehension of all persons, whether lay or medical, that this disastrous malady, responsible as it is for one-third of all the blindness in the civilised world, can be absolutely prevented by any well-thought-out and comprehensive scheme. The recent action of the British Medical Association in the matter affords some prospect that at length this most desirable end will be attained in the near future. Readers may remember that the body in question appointed in the course of 1898 a committee to deal with the subject. The composition of the committee, under the chairmanship of Mr. Sydney Stephenson, was sufficiently large and representative to guarantee a well-informed and impartial investigation into the whole question, and amongst other special interests directly represented were the ophthalmological, public health, midwifery and gynaecology, pædiatry, and bacteriology. As the outcome of the inquiry, an important memorandum was drawn up by the chairman of the committee, and upon this document a number of recommendations and conclusions were based. Some of the latter demand the careful consideration of all interested in the prevention of blindness. They are as follows:—"1. Ophthalmia neonatorum accounts for upwards of 10 per cent. of all cases of blindness. 2. Cases of ophthalmia show a slight but steady decrease, so far as can be

judged by returns from British lying-in hospitals and eye hospitals. 3. Ophthalmia is still the cause of at least one-third of the blindness in the inmates of British blind schools. 4. Cases of ophthalmia without adequate treatment have been found to occur amongst cases attended by medical practitioners, as well as amongst those attended by midwives." The vital nature of these propositions are self-apparent, a remark that applies with equal force to the preventive measures recommended by the committee. Notification naturally comes first on the list, and this, it is urged, should be made compulsory by the Local Government Board. This step, however necessary it may be in itself, may apparently foreshadow the notification of gonococcus infection amongst adults. The further recommendation that the bacteriological examination of vaginal or conjunctival discharges should be undertaken by the local sanitary authority, free of charge, appears to be quite in accord with modern views. The responsibility of seeing that cases thus notified are properly attended medically is thrown upon the local sanitary authority. The committee takes the common-sense view that, as far as may be, the treatment of infantile ophthalmia should not involve the separation of mother and child. The instruction of the public by local authorities is suggested, and more particularly that all midwives should be specifically warned as to the dangers of the disease and the preventive methods to be adopted. One of the most important remaining recommendations is that the presence of purulent vaginal discharges in parturient women should be included in the rules of the Midwives' Board among the conditions for which medical help should be summoned. The remainder of the committee's very able report includes directions to midwives and nurses, on the one hand, and to medical practitioners on the other. One noteworthy point is that the use by midwives of strong chemical applications (*e.g.*, Crédé's method) is not advocated. In many ways we regard this report as one of the most important that has ever been issued authoritatively by the medical profession for the guidance of the public generally, and of local administrative bodies in particular, as to the prevention of a malady that entails great disability upon individuals and an increasing economic burden upon the community.

#### THE ROMANCE OF SCIENCE.

WE publish elsewhere the first part of the address recently delivered at Stockholm by that veteran pathologist, Professor Metchnikoff, under the Nobel bequest. With the simplicity that comes of ample knowledge, the lecturer reviews the researches and the discussions that culminated in the recognition of phagocytosis as a vital phenomenon intimately concerned with the defence of the organisms against pathogenic bacteria from without. The results testify eloquently to the value of theoretical research since the hypothesis, owing to the special technical difficulties inseparable from this line of research, had to be based in great measure on deductions from very elusive phenomena. He tells us how the accuracy of each alleged discovery was wrangled over by intellectually-hungry professors, how first one school, then another, scored a point, only to be worsted in the

next encounter, how they boxed (with arguments in lieu of fists) strictly according to the rules of the game, shaking hands with each other as soon as the umpire of skilled opinion had given its award. There was a noble simplicity about the conception of phagocytosis that commended it for acceptance. It embodied the abstract idea of a combat between good and evil within the organism, akin to the struggle between moral forces in the psychical domain. At present, in spite of the vast amount of information that has been accumulated in regard to phagocytosis, we are still perforce mere spectators, unable to afford our friends the phagocytes any very substantial assistance in the warfare they are waging on our behalf. Even such a distinguished bacteriologist as Metchnikoff, when it comes to explaining the intimate mechanism of immunity, is fain to admit that he sees "as through a glass, darkly." He describes to us the tactics of the besiegers and the besieged, how they squirt soluble substances at each other that cripple or paralyse, and so render the enemy on either side amenable to absorption and disintegration. He paints a lurid picture of the phagocyte that has absorbed more bacilli than it can assimilate, and how it is burst asunder, with the result that the invaders carry the citadel. So far the doctrine of phagocytosis has only been empirically applied to the control of disease. Poultices assist the organism in resisting infection by attracting a plentiful supply of leucocytes to the field of battle, and Bier's method presumably acts in the same way. Pus cells that were formerly regarded as the incarnation of all that was evil are now known to represent the marshalled hosts of our defenders doing battle with the septic germs, to be encouraged rather than repressed. Active efforts are being made to discover means of stimulating phagocytosis and of reinforcing the protective properties of our cellular defenders, and already something of the kind has been achieved by the injection of colloid metals, which, directly or indirectly, do materially aid in the scheme of defence. Outsiders can have little idea of the well-nigh insurmountable difficulties that are met with in the prosecution of this department of research, and of the immense expenditure of time, skill and energy required for the achievement of the slightest progress in this domain. Honour to the men who, undaunted by obstacles, unremittingly pursue the investigations from which we are entitled to hope so much.

#### CURRENT TOPICS.

##### A New Ophthalmological Congress.

WE are pleased to be able to give an early announcement to our readers of the inauguration of a new Congress of Ophthalmology. Those interested in that branch of medical work know that for the last four years an informal meeting of ophthalmic surgeons has been held every summer at Oxford. The proceedings thereat included the reading of papers, discussions, examination of cases and appliances, and the performance of new operations. On July 15th it was moved in the Common Room in Keble College by Mr. Sydney Stephenson, seconded by Dr. R. A. Reeve, Dean of the Medical School at Toronto, and carried unanimously, that the meeting should be placed on a

permanent footing. The motion received the support, amongst others, of Prof. Deutschmann (Hamburg), Prof. Motais (Angiers), Prof. Dufour (Lausanne), Wendell Reber (Philadelphia), Dr. Vail (Cincinnati), Dr. R. J. Coulter (Newport), Louis Werner (Dublin), and H. Walker (Glasgow). Prof. Osler then moved, and Dr. Grainger, of Chester, seconded, that a new Society be formed under the title of the Oxford Ophthalmological Congress. With a view of carrying out the necessary organisation, a committee was formed consisting of Sir Anderson Critchett, Sir Henry Swanzy, Prof. Osler, Dr. Hill Griffiths, Dr. George Mackay, with Mr. R. W. Doyne as Chairman, and Mr. Sydney Stephenson as Honorary Secretary.

#### Fatal Hair Washes.

THE reckless use of dangerous drugs by hairdressers has led to many accidents, some of them fatal. Some of the dyes used by them contain nitric acid and other potent ingredients, and we have seen a society woman with her hair destroyed and a deep slough on the ear caused by a careless application of acid. Cases have been reported of death due to lotions containing corrosive sublimate. Some years ago it was the fashion to sell lotions containing petrol and benzine for dressing the hair and cleansing the scalp, but the occurrence of several deaths, due to explosions from accidental ignition of the vapour thrown off from the mixture, led to their discontinuance in the United Kingdom. Not long ago a case occurred in Paris in which an actress was killed as the result of the ignition of an explosive vapour by a stove at a distance of several feet. Another risk is that of anæsthesia from the use of volatile drugs giving off anæsthetic vapours. At least two cases have been recorded from the use of carbon tetrachloride, one of them connected with the hairdressing branch of a well-known London store. That particular drug was introduced as an anæsthetic some years ago, but proved too feeble for general use, and it has been practically forgotten by medical men until brought into notice again by the recent tragedy. Surely it is not too much to ask the Home Office to exercise some sort of supervision over hairdressers and other scientifically untrained persons who deal in such terribly dangerous drugs. If a medical man were to give a patient such a lotion and death were to result, he would most assuredly be held responsible for his remissness. Why, then, should a grossly ignorant person be permitted to handle the same drugs with impunity? If the Home Office, with these tragedies on record, does not take immediate steps to put a stop to the use and sale of deadly drugs by hairdressers, the responsibility of future damage and death must lie at their official door.

#### A Norwich Scandal

At an inquest held at Norwich on July 20th, before the City Coroner, Dr. Crosse, who made the post-mortem, asked leave to make some remarks, and, being allowed to do so, he said that the post-mortem in that case had to be made on a sofa in a room in which the window was screwed down, and that on a subject who had been dead for forty-eight hours in the height of summer. These surroundings, he said, were luxurious compared with some he had had to put up with in Norwich. He had made post-mortems on feather beds, kitchen tables, chests of drawers, and even on the floor. He had had to use dinner-plates and dishes on such occasions for the purposes of the examination, and, in spite of all precautions, it was frequently impossible to prevent

relatives and friends from coming in, while a gaping crowd of neighbours not infrequently would gather round the door and discuss the case. Representations had been made by medical men again and again, individually and collectively, but without effect. The present mortuary accommodation was quite inadequate for a place of the size of Norwich. We cannot express our own opinion better than by repeating some words used by Dr. Crosse. "All this," he said, "is disgusting, degrading, and indecent." It is, and had it not been publicly stated by a medical man of repute we could not have believed it. Norwich has acquired the proud title of the "ancient and religious city"; till it alters its mortuary arrangements we can only think of it as a home of squalor and barbarism.

#### The Newcastle Coroner and Dr. Coley.

WE had occasion recently to comment on the way in which the Newcastle Coroner had treated Dr. Coley of that town at an inquest, and we find that the Coroner, having had his insinuations and mistakes pointed out to him in a very temperate letter written to the press by Dr. Coley—the only form of public defence open—took occasion at the adjourned inquest to make a still graver statement, namely, that he had not understood that Dr. Coley had examined the patient. The suggestion here implied was effectively exposed by a further letter by Dr. Coley, to which the Coroner again replied at another inquest by making a long statement to cover up the false position he had originally assumed, and introducing details which appear to have been so distorted in his mind that, instead of clearing Dr. Coley, they made him appear in a still less advantageous position. Again Dr. Coley addressed the press in a letter marked by great courtesy and good sense, pointing out the fallacies alleged, and saying, *inter alia*, "In many cases the reckless observations of coroners have given undeserved pain and have cruelly injured the reputation of professional men." Such, alas! is too often the case, and it is lamentable that men in their position should so often use their privilege in a way which misleads the public and injures medical men at the same time.

#### Illness and Trials.

Two cases in prominent notice last week brought out again a point in law often urged, namely, that when a person asserts that he is unable to attend a law court for trial on account of illness, the court should send an official medical examiner to report on the person's state, and that it should be guided by his certificate alone. The first of these cases was that of Mr. Benson, whose trial for alleged frauds in connection with Feltham's Bank has been postponed two or three times on the ground of illness. Another postponement was applied for last week, and two medical men gave evidence of his state of health, and the Lord Chief Justice said that he was not satisfied with what they said. The other instance was that of the redoubtable Miss Charlesworth, who since her re-appearance on earth after her motor accident has three or four times failed to meet her creditors before the Registrar in Bankruptcy, she also alleging reasons of health for her absence. Exophthalmic goitre was first put forward, and last week "train-sickness" was alleged. The Registrar spoke strongly on the subject, saying certificates of health are sometimes too freely given, and, finally, that if the debtor failed to appear at the next sitting he would issue a warrant for her arrest. It is clear that a medical man who is attending a private patient is bound to say what he legitimately can in patient's favour in a certificate, and it is also clear that the

excitement of a court trial is good for no illness that one knows of. On the other hand, there at times are questions of public policy involved with which it is not a medical man's business to concern himself, and the point a court has to decide is whether the detriment to health outweighs the detriment to public morals. It is not fair to try to throw this burden on a private practitioner, and we hold strongly that the court should send its own official medical referee to consult with the patient's attendant, and to issue a report on which the court should act.

#### A Tuberculosis Dispensary for Dublin.

FOR some eighteen months past the Dublin hospitals have in their out-patient departments paid special attention to the home treatment of tuberculosis, working in connection with the Women's Health Association. The latter body has provided health visitors and nurses for such tuberculous patients as were willing to receive their help. We learn that, as a result of Lady Aberdeen's recent visit to America, a development is to take place in this line of work. Mr. Collier, a wealthy American of Irish family, has offered sufficient funds to equip and maintain in Dublin a dispensary for tuberculosis on the lines of those run in various large cities. The details of the scheme are not yet filled in, but the venture is one which deserves every success. No disease lends itself more to home treatment, and in none is wise control of house treatment more important. We have great hopes, therefore, that a judiciously-conducted tuberculosis dispensary may be an active factor in the campaign against the disease in Dublin. We have no doubt that in the organisation of the dispensary Lady Aberdeen will be guided by the best medical opinion.

### PERSONAL.

ON July 23rd the King, accompanied by the Queen and Princess Victoria, opened the new in-patient department of the Royal National Orthopaedic Hospital, Great Portland Street, W. The King was received by the Duke of Marlborough, the Earl and Countess of Denbigh, the Mayor and Mayoress of Marylebone (Colonel and Mrs. Alfred J. Hopkins), Sir R. B. Martin and Sir Samuel Scott, M.P. (Hon. Treasurers), Mr. J. R. Cooper (Chairman of the Executive Committee), Miss Hunt (Treasurer of the Ladies' Committee), Mr. Muirhead Little (Senior Surgeon), and Mr. Arthur Morley (Secretary).

PRINCESS CHRISTIAN and Princess Victoria of Schleswig-Holstein attended the "View Day" of the Frimley Sanatorium and Convalescent Home attached to the Brompton Hospital for Consumption on July 17th.

DR. ISAAC MOSSOP has been appointed by the Lord Chancellor to be a Justice of Peace for the City of Bradford.

MR. F. N. DOUBLEDAY, L.D.S., has been awarded the Guy's Hospital Travelling Scholarship of the value of £100.

THE University of Geneva has lately conferred upon Lord Lister the honorary degree of Doctor of Medicine as an appreciation of his epoch-making contributions to surgery.

THE eleventh South African Medical Congress will be held in Durban, August 2nd to 7th, 1909. His Excellency Sir Matthew Nathan, K.C.M.G., R.E., the Governor of Natal, will open the proceedings.

The President of the Congress is Dr. H. A. Dumat, and the Vice-Presidents are Drs. W. Watkins-Pitchford and W. J. Hill. The Hon. Secretary is Dr. P. Murison, and the Hon. Treasurer Dr. G. L. Bonnar.

PROFESSOR WILLIAM STIRLING, M.D., Dean of the Medical Faculty and Professor of Physiology in Manchester University, has been nominated to represent the University as its official delegate at the forthcoming quinqucentenary of the University of Leipsic.

MR. S. G. KIRKBY-GOMES, late Professor of Surgery in the Imperial College of Medicine, Tokio, has been appointed Representative of the Ceylon, South India and Madras branches on the Council of the British Medical Association, in succession to Surgeon-General Brown.

THE following Fellowships have been awarded as the result in recent examinations at the University of Liverpool:—Robert Gee Fellowship in Anatomy, R. H. Mole, M.D.; Holt Fellowship in Physiology, C. H. H. Harold, M.B., Ch.B.; Thelwall Thomas Fellowship, W. W. Mackarell, M.B., Ch.B.; Ethel Boyce Fellowship, W. R. Pierce, M.B., Ch.B.

THE honorary degree of M.D. of the University of Dublin has been conferred upon the following medical men:—Sir Alfred Keogh, M.D., K.C.B., Director-General of the Army Medical Service; Dr. W. Hale White, senior physician to Guy's Hospital; Dr. W. P. Herringham, physician to St. Bartholomew's Hospital; Dr. G. A. Gibson, physician to the Royal Infirmary, Edinburgh; and Dr. G. Redmayne Murray, Professor of Pathology in Victoria University, Manchester.

THE prize-winners at the Royal Army Medical College at the recent examination at the termination of the junior course were:—Lieut. H. S. Ranken, R.A.M.C., the Herbert, De Chaumont, Tulloch Memorial, Ranald Martin, and Marshall Webb prizes; Lieut. J. A. Manifold, R.A.M.C., the 1st Montefiore prize; Lieut. C. L. Franklin, R.A.M.C., the 2nd Montefiore prize; Lieut. A. M. S. Jukes, I.M.S., the Parkes Memorial prize; and Lieut. B. Gale, I.M.S., the Fayrer Memorial prize.

THE following appointments have been made to the medical staff of St. John's Hospital for Diseases of the Skin:—Dr. William Griffith, M.B., Vict., M.R.C.P., has been appointed Assistant Physician; Dr. C. A. McBride, M.D., C.M. Toronto, has been appointed Casualty Officer; and Miss Louisa Woodcock, M.D. Lond., has been appointed Clinical Assistant.

A TELEGRAM from Rio de Janeiro dated July 17th states that Dr. Oswaldo Cruz, Director-General of the Sanitary Service, announces that the bacillus of smallpox has been discovered in the course of bacteriological researches carried out at the Oswaldo Cruz Institute by Drs. Henrique Beaurepaire de Aragao and Prowazek.

AT the International Congress of Nurses at the Caxton Hall, Westminster, Lady Helen Munro-Ferguson, lady president of the Home Committee of Lady Minto's Indian Nursing Service, and a member of the Advisory Council of the Territorial Force Nursing Service, occupied the chair.

A STATUE was erected in the Ranelagh Gardens, Chelsea Hospital, in September, 1865, in memory of Sir James McGrigor, Bt., the first Director-General of the Army Medical Department. For a considerable time past it has been felt that the new Royal Army Medical College, Grosvenor Road, would be a more fitting place for this memorial. Permission having been obtained from the various authorities concerned, the statue was transported and re-erected recently on a site in the grounds of the college on the north-east side and facing the Tate Gallery, the cost being defrayed by the officers of the Royal Army Medical Corps.

# A FRENCH CLINICAL LECTURE

## ON

### A STUDY OF ACUTE TUBERCULOUS RHEUMATISM.

By ANTONIN PONCET, M.D.,  
Professor of Clinical Surgery at the Faculty of Lyons,

AND  
M. LERICHE, M.D.,  
Surgical Registrar at the Lyons Faculty of Medicine.  
[SPECIALLY REPORTED FOR THIS JOURNAL.]

RHEUMATIC troubles of bacillary origin are met with in three different forms. In one variety there is vague pain, either spontaneous or provoked, more or less localised in the joints or extending down the limbs. A second variety is characterised by acute arthritis, sub-acute mono-articular, or poly-arthritis, closely resembling ordinary acute rheumatism, while in a third variety there are chronic arthropathies, with a tendency to ankylosis.

*Arthralgia.*—Under this name we must include a whole series of rheumatoid manifestations, more or less limited to the joints, which are frequently met with in tuberculous subjects. Tuberculous subjects, indeed, are liable to many "algias": myalgia, muscular hyperæsthesia, facial neuralgia, intercostal sciatica, &c., the result of toxæmia. The joint pains are due to slight, purely inflammatory changes in the bones or synovial membranes. The pain may occur spontaneously, or be elicited by manipulation; it is rarely very severe, being, as a rule, vague, ill-defined, and increased by exercise and fatigue. As a rule, it subsides with rest, but is sometimes very refractory to treatment. Many joints may be affected simultaneously, but the pain is always more pronounced in the large than the small joints. It is often complained of in the region of the spinal column, giving rise to errors of diagnosis.

The various "algias" deserve attention, for they may be premonitory of latent tuberculisation. They may long precede more virulent lesions, so that their recognition is important. In children and adolescents they are often ascribed to osteitis, or "growing pains," and their situation in the epiphyseal regions renders a mistake all the easier. Osteoarthralgia is not infrequently met with in tuberculous subjects at the stage of caseation, and it may be the only remaining trace of cured tuberculosis. Barbier makes a distinction between osseous and muscular hyperæsthesia, which are particular manifestations of tuberculous rheumatism to which we shall have occasion to refer later. Their characteristic feature is the absence of any objective sign, there being neither swelling nor redness of the soft parts, their variability and fugitive character, flying from one joint to another, ultimately taking up their residence, it may be, in a rather brutal fashion in one particular spot.

*Acute and Sub-acute Tuberculous Rheumatism.*—This form is characterised by sudden effusion into one or several joints, presenting the closest possible resemblance to ordinary acute rheumatism. Less frequently met with than the preceding form, it often escapes recognition, being mistaken for ordinary rheumatic fever. Now, it cannot be too strongly urged that the diagnosis of polyarticular rheumatism amounts to nothing; we must go beyond this gross morphology, and seek by every means in our power to establish a complementary pathogenesis. With perseverance and practice it will often be possible to satisfy ourselves that the rheumatic fluxion is only a prominent indication of a masked infection, and not a disease *per se*. In regard to tuberculosis, more than any other disease,

it is of the greatest interest for us to arrive at an opinion on this pathogenesis.

Tuberculous rheumatism, which often supervenes in the course of existing tuberculosis, medical or surgical, during the germinative period of recent tuberculosis, is often the earliest manifestation of tuberculous infection, often long antedating the further symptoms.

Of 100 patients admitted to the Lyons hospital for rheumatic joint lesions recognised to be tuberculous, in thirteen the joint symptoms constituted the first indication; of 100 admittedly tuberculous patients, in twelve there was a history of acute articular rheumatism at some previous date.

The symptoms of acute tuberculous rheumatism are hardly to be distinguished from ordinary acute rheumatism or acute pseudo-rheumatism. The suddenness of its onset, without any premonitory symptoms, resembles that of certain infective arthropathies, especially gonorrhœal affections. It is specially apt to attack the larger joints, knee, hip, elbow, wrists, feet, &c.

The general state of the patient, the pulse and the temperature, depend far more on the degree of constitutional infection than on the arthropathies which are the manifestations thereof. A grave general state, with joint lesions of medium severity, often constitutes a presumption in favour of tuberculous rheumatism.

Certain peculiarities at the onset and towards the termination deserve special mention. Tuberculous rheumatism may recur at more or less distant intervals, the intervals being quite free from any trouble of the kind. This point is important, because it is one cause of confusion with ordinary rheumatism.

Its duration is variable. It may disappear in a few days or last for weeks, with exacerbations and remissions. Sometimes it flies from joint to joint like ordinary rheumatism; sometimes it runs a protracted course, with painful outbursts which, when frequently repeated, are the precursors of chronic deforming arthritis. In other instances it remains localised in one or several joints with an obstinacy that recalls gonorrhœal rheumatism.

Later on we shall have occasion to refer to its termination in fungous transformation or ankylosis, but it often subsides altogether without leaving any trace.

Having enumerated these general characters, we must make a distinction between two principal varieties of rheumatism, based upon the conditions under which they supervene—viz., primary and secondary. We have already insisted on the importance of this distinction; the first form possesses diagnostic and prognostic importance of the first order; the second is only an episode of uncertain prognostic importance which does not materially influence the pathological situation of the tuberculous subject affected thereby.

*Primary Acute Tuberculous Articular Rheumatism.*—Of this there are two forms, one in which the tuberculous rheumatism attacks the serous membranes as well, so that, side by side with the

arthropathies, we get pleurisy, pericarditis, &c. In the other form it is limited to the joints.

*The Acute Diffuse Serous Form.*—This is not very common and only accounts for some 15 per cent. of cases of primary acute rheumatism. It is easy to recognise by its typical course. A young subject in the best of health, or in a state of morbid imminence by reason of overstrain or worry, is suddenly seized with acute inflammation of the joints accompanied by a rise of temperature, dyspnoea, rapid pulse, and sweats. The constitutional symptoms are well marked, and one has the impression of a grave form of infection. The joints are hot, red and painful, and incapable of the slightest movement. The general health becomes more and more unsatisfactory, and we get inflammatory mischief in the great serous membranes, pleura, meninges, or peritoneum, either simultaneously or consecutively. Each fresh attack is ushered in by a further rise of temperature and a recrudescence of the constitutional symptoms. Recovery may take place, but more frequently the patient succumbs to generalised tuberculosis. The joint troubles, which sink into insignificance before the other manifestations, persist until the end. The disease may run on for months, its course being characterised by intermissions and exacerbations.

This variety of tuberculous rheumatism, which is especially interesting on account of the supervention of the joint troubles as a prelude to the graver manifestations, is closely allied to articular granulia. The clinical aspect is the same in both, and the picture is that of ordinary acute rheumatism. The diffuse form, however, does not run such a destructive course as synovial granulia, otherwise they are practically indistinguishable.

On the other hand, the presence of granulations in the one and their absence in the other enables us to distinguish between the two.

*Simple Acute or Sub-acute Form.*—This is the commonest and most interesting form, as well as the most useful to become familiar with on account of its semeiological importance and nosological bearings. It occurs mostly between the ages of twenty and thirty years, and the attacks recur at uncertain intervals without any settled periodicity. It would seem that the joint fluxions are the more numerous the less the subject is prepared by heredity or personal antecedents to tuberculosis. On the contrary, in individuals who are hereditarily predisposed, in the subjects of toxæmia, in the overwrought, in fact, in all who easily fall victims to the tubercle bacillus, premonitory disturbances are rare or unique. As Mazot aptly remarks: "there is no preface to such a short chapter."

The symptoms then present themselves in two phases. The first stage is marked by acute joint troubles which monopolise one's attention, to the exclusion of any other pathological causation. In the second we get more virulent localisations in a joint or some other organ, and the rheumatic arthropathies run a "crescendo" course.

The initial articular troubles are in no wise characteristic. There are several outbursts of poly-arthritis akin to ordinary acute rheumatism. These outbursts run a most uncertain course. Some improve in a few days, to be followed at regular intervals by recurrences, or persist for weeks or months without being in the least benefited by the salicylate treatment.

The general health, already unsatisfactory, is gravely compromised, the patient loses flesh and strength, the appetite diminishes, and the fever increases, in fact, we get the whole series of symptoms characteristic of latent tuberculosis, without any auscultatory sign, the joint troubles

attracting our attention to the exclusion of the rest. The inefficacy of the specific treatment is an aberrant, odd case of rheumatism causes surprise, and makes one think of pseudo-rheumatism, and the cause is looked for in every direction except that of tuberculosis.

By and bye the articular manifestations improve, the arthropathy becomes localised in one or several joints, and assumes a chronic form or disappears. The apparent rheumatism is succeeded by frank tuberculosis. The first act has come to an end. Then we enter on the second stage, which presents three types according to the bacillary localisation and the termination of the initial arthritis:—

(a) In the first type the tuberculous process attacks one or other organ—lung, intestine or testicle—and the arthropathies subside without leaving any trace. They retrocede as soon as we get the initial symptoms of visceral tuberculosis, or much later. In such case the tuberculous rheumatism and the more virulent lesion run their course side by side independently of each other for weeks, or it may be for months. Sometimes the rheumatism disappears before the tuberculosis, which it precedes, has broken out. A variable lapse of time intervenes between recovery from the arthritis and the clinical onset of the fresh localisation, and during this time the patient is now apparently in perfect health, in fact, quite cured. This variety of tuberculous rheumatism, just like ordinary acute rheumatism, is characterised by the possibility of complete recovery without leaving any trace of damage in the joints attacked.

(b) In the second type, after a very acute onset, the arthropathies partially retrocede, but some joints remain inflamed and become ankylosed, do what we may. Soon, or it may be after a long interval, we get discrete signs of pulmonary tuberculosis. A patient of ours who had been living in a tuberculous environment was seized with acute rheumatic poly-arthritis, which did not subside for a long time. When the pain subsided, it was found that one elbow, one wrist and one foot were ankylosed, and radiography showed the ankylosis to be bony. Two years later this patient manifested mild symptoms of infiltration of one apex, the nature of which was confirmed by a very positive sero-reaction. We shall refer to ankylosing arthritis later.

(c) A third type is characterised by a tendency for the inflammatory symptoms to become localised in one or two joints, which slowly become fungous. This is by no means uncommon. It runs a slow course. The diseased articulation remains swollen and is painful on certain movements. From time to time, following fatigue or effort, there is a fresh outbreak of inflammation which clears up very incompletely. This state may persist for years. It is still thought to be a case of chronic rheumatism, when the earliest signs of visceral tuberculosis make their appearance, thus establishing the exact pathogenesis of the joint affection. Little by little things become cleared. The diseased joint increases in size, there are tender spots, and it runs the ordinary course of tuberculous arthritis. Long before the appearance of any fungosity inoculation of the synovial fluid in a guinea-pig gives rise to tuberculosis. When tuberculosis invades several joints already attacked by tuberculous rheumatism, it may assume various forms, fungous synovitis, plastic synovitis, rice grains, hydrops, tuberculosis, in fact, the whole gamut of lesions engendered by the tubercle bacillus.

(d) A last type is characterised by the transformation of the initial arthritis into simple chronic rheumatism. To begin with, the affection presents some resemblance with those just described, but



the lesions remain of the chronic inflammatory type. Its nature is usually made clear by the evolution of tuberculous lesions elsewhere, in the lungs, glands, &c.

**Acute Secondary Articular Rheumatism.**—Acute rheumatism supervening in the course of clinically appreciable tuberculous lesions is by no means rare. Until quite recently these joint troubles were looked upon merely as arthritic manifestations, and they used indeed to be considered of favourable augury, in view of the hypothetical antagonism of arthritis and tuberculosis. No such antagonism exists. The apparently arthritic subject whose tuberculosis has undergone sclerosis is merely an ordinary tuberculous subject suffering from bacillary rheumatism. The arthritis was tuberculous from the onset. Before the discovery of the bacillus we were fain to invoke mixed infection to explain the production of rheumatic white swelling. The straightforward conception of inflammatory tuberculosis greatly assists us in understanding all this. The continuity of action of an ever-present infection readily explains the various reactions observed in particular patients, as, for example, in the case of a patient of Paviot's, at the Perron Hospital, who, after a strumous sickly childhood and severe anæmia at puberty, developed facial lupus at nineteen, followed a little later by acute articular rheumatism, with two or three recurrences, culminating in arthritis deformans.

Many such cases might be related, some of them even more complicated, which can only be explained on the hypothesis of a tuberculous origin. In most of them we find a constant relationship between the joint troubles and the visceral lesions; as the one recedes the other gets worse. This alternation of pathological phenomena is often mentioned by the patients themselves. It is the general rule until some grave localisation (suppurative osteo-arthritis of a large joint, Pott's disease, &c.) supervenes, whereupon the type becomes fixed, the fluxional metastatic type disappearing.

Nevertheless, we most commonly meet with attenuated lesions with fibroid tendencies, which therefore run a slow course, the patients often living for years. This is vastly different from arthritis, for the symptoms as a whole are due to the original virulence of the micro-organism.

NOTE.—A Clinical Lecture by a well-known teacher appears in each number of this journal. The lecture for next week will be by D'Arcy Power, F.R.C.S. Eng., Surgeon to and Lecturer on Surgery at St. Bartholomew's Hospital. Subject: "A Case of Heredo-Syphilis."

## ORIGINAL PAPERS.

### A BRITISH MEDICAL REMINISCENCE.

By H. MACNAUGHTON JONES, M.D., M.Ch., M.A.O.

Formerly University Professor of Midwifery in the Queen's University, Ireland.

To take a glance into the tablets of memory and recall the scenes and events of the past is not unusual on the anniversaries of institutions and associations. So it appears to me to place, however so faintly, on the screen of the present the recollections of an annual gathering of the British Medical Association in Ireland must be of interest on the anniversary in Ireland of the first provincial meeting, on this, the fourth that has occurred in the sister isle. It is a long hark back to the foundation by me in 1876 of the "South of

Ireland," the premier branch of the Association in Ireland. At the time my old friend the then Editor of the *Journal*, Ernest Hart, thought that such an effort would prove a failure, and rather discouraged the idea, but within a few weeks from the reception of his discouraging letter I received one from the Council of the Association in London conveying its thanks for the formation of the branch. I then had associated with me one of the most versatile and brilliant intellects the Irish schools have provided in the last half-century, the late Ringrose Atkins, then attached to the Cork Lunatic Asylum under Dr. James Eames, and afterwards Resident Medical Superintendent of Waterford Asylum, who subsequently, with Dr. Denis O'Connor (junior) acted as Assistant Secretary to the meeting. Without his assistance it is doubtful if I could have brought either the formation of the branch or the meeting to a successful issue. In talking to the late Professor Charcot, who was present in 1879, he said that the best artistic microscopical delineations of the changes in the brain of the insane he had seen were those of Ringrose Atkins. Some beautiful sections of these in cases of insane alcoholics I still have and prize. Also, at that time, the then "Queen's" College had at its head a President who entered most heartily into every scheme that might in any way advance the interests of the College, and especially those of its medical school. During his Presidency the College in 1882 reached the high-water mark of its prosperity. Dr. W. K. Sullivan, a most distinguished chemist, was an ideal collegiate head. Expansive and liberal in all his views, having from his training German ideals of University education and practical teaching, his aim was to make the College a centre of technical instruction in the faculties as well as a fountain of general culture for Munster.

Therefore, he threw himself whole-heartedly into the project of bringing the Association to Cork, and when it met gave over the entire College to the needs of the meeting, and placed all the keys in my keeping for that week, making me rather nervous of the responsibility from the fact that I had before my mind the comparatively recent burning of part of the College buildings, supposed at the time to be the work of some fanatic or vindictive incendiary. In 1877 the Association met in Manchester at Owens College. There are some who will remember the hospitable efforts of Ross, one of the ablest of neurologists; Leech, the genial therapist; and those most popular of surgeons, E. Lund and Thomas Jones, to make that meeting the success it was. While attending it I sounded the then President of the British Medical Association, the late W. D. Husband, of York, as to the possibility of the Association visiting Cork in 1878, and, receiving a favourable answer, in September, at the instance of the local branch, I convened a meeting of the profession of Cork and the South of Ireland to invite the Association to meet in the southern capital in 1878.

It must be remembered that we had then only some thirty-five medical men in the City of Cork, whereas there are now over eighty, so it was not to be wondered at that the proposal somewhat staggered my medical friends and "alarmed" our future President when I made it. I have the original invitation as it was issued before me as I write, and of the thirty names appended to it, only seven now survive on the Register: Dr. N. J. Hobart, Professor Henry Corby, and Drs. Adderley, D. Donovan (M.O.H., Cork), Hadden, D. O'Connor, and J. E. Bull (S.A.). The courteous reply of Mr. Husband to that invitation conveyed the information that, as far back as 1874, at the Norwich meeting, Bath had invited the Association to that city, and that this prior claim, again urged, had to be acknowledged for 1878, but that the Association would be pleased to visit Cork in 1879. Dr. J. R. Harvey, my predecessor in the Obstetric Chair in the College, was chosen President, but he had to decline the position as he was then retiring from practice and leaving Cork, and Dr. D. C. O'Connor, Professor of Practice of Medicine in the College, was elected in his stead. No one who still remembers the dignified and venerable President, who, the year following the meeting, received the honorary degree of LL.D. of Cambridge University, can forget how admirably he filled his

post. A Dublin University graduate in Arts and Medicine, and educated in Paris, a disciple of Laennec, he occupied the Chair of Medicine from the opening of the College until his death. He was a cultured physician, and gentleman of the old school—a type to whom the unwritten laws of medical ethics and etiquette were more sacred than those more modern and written ones, which are the outcome of a veiled trades unionism and protectionist policy. In 1878 I worked through the Bath meeting as Vice-President of the Obstetric Section, under my old friend Alfred McClintock, ex-Master of the Rotunda, and the accomplished author of "Smellie's Life" for the Sydenham Society. Here I met for the first time the late Marion Sims, one of the most delightful of personalities. Together we went to the Royal Bath Hospital, where we saw a number of interesting cases. Dr. Falconer, of Bath, a foremost figure in the Association at the time made an admirable President.

Out of the 500 names entered at the Cork meeting there are still 110 on the Medical Register. The anxiety as to its success was not lessened by the fact that rain fell without intermission during July, ceasing only on the Saturday previous to the opening Monday, and then, fortunately, came a gloriously fine week ending by a downpour on the Sunday following. This preliminary wet told on the numbers attending. But as a majority of visitors brought their lady relatives with them, this swelled the numbers considerably and taxed our local accommodation to the utmost. But this deficiency was met by the generous private hospitality of the reception committee and the citizens of Cork.

And what a meeting that was! Alfred Hudson, the Nestor of Irish Medicine, gave the address in medicine on "Laennec and his Work"; William Savory that in Surgery, and Andrew Fergus that in Public Medicine. Savory's address, the universal theme of admiration, was a masterpiece of erudition and eloquence which occupied some fourteen columns of the *British Medical Journal* of August 9th, 1879. It is interesting to note the subject of the address, "The Prevention of Blood Poisoning in the Practice of Surgery." As we read it now by the light of our most recent aseptic methods, we can only marvel at the prescience and early grasp of the essential principles of aseptic surgery which it showed; the sources of hospital contamination, the avenues of septic invasion, the advantage of thorough cleanliness and exclusion of air from wounds, the value and limits of antiseptic precautions. And yet in his dealings with Listerism, the outcome of Pasteur's researches and its results, that address is mainly of interest as proving how far short it fell of what subsequent experience has shown to be the ideal *technique* of an operative wound. At least he proved how necessary it is not to limit our attention to the person of the patient and the wound area. He spoke advisedly when he expressed "diffidence in his own judgment" on certain points, and that "if he were in error" his "words would prove no serious obstacle to the progress of truth." It is by such gradual following out of Pasteur's motto, "Perseverance in Effort" that Science ultimately reaches its goal. Andrew Clark, President of the Medical Section, dealt with the subject of Medical education, and his shrewd analysis of our methods have received ample confirmation in the development of the present rather chaotic system of sketchy teaching, hurried examinations, and superficial tests of knowledge which open the portals of practice just as the practitioner is beginning to find out how little of the various special departments of medicine he thoroughly knows. In the same address there were weighty words on vivisection which might well in this year of grace 1909 be read with advantage by some of the rabid fanatics and denouncers of medical research, who assume to themselves the rôle of critics and judges of the motives and actions of men whose sole object is to achieve, at the least cost of suffering to the lower animals, the saving of life and the lessening of pain in the human race. Professor William Tanner, known in my student days as "The Slasher," from his bold, if rather risky, surgery, was a pupil of the great Civiale, and one of the quickest lithotomists I have ever seen. In presiding over the Surgical Section he gave a historical survey

of the progress of medicine in Cork, declaring that this day should be "marked with a white stone in its history."

Henry Power delivered a classical address, reviewing the recent progress of Physiology, showing the rapid strides that just then were being made. He closed with a well deserved compliment to the then occupant of the chair in the College, Professor John Charles, Vice-President of the section, who has only recently resigned after having filled it with distinction for some thirty years. Eames, who came to Cork from Letterkenny, the able administrative head of the Cork Asylum, presided over the Psychology Section.

It was a notable feature of the Cork meeting that, not without some difficulty, I persuaded the Council of the Association to permit me to form sub-sections in the Surgical Section—viz., Ophthalmology, Otology, Laryngology, and Dermatology. Fear was expressed that this splitting-up would weaken the section. But it proved an unqualified success.

A sad event occurred in connection with one of these sections. Tilbury Fox, then in the foremost rank of living dermatologists, was to have been my guest and president of that section. I had a letter from him from Paris, whither he had gone shortly before the meeting to get quiet and to prepare his address. Suddenly came the news of his death. There was then cut off prematurely one of the kindest-hearted and most honourable of men. Professor T. McCall Anderson took his place, and gave an address in dermatology. Dr. G. H. Kidd, the Master of the Coombe Lying-in Hospital, President of the Obstetric Section, took for his theme the treatment of "Uterine Tumours by Dilatation and Ecraseur." What a "whole world" separates us from such an idea and the modern hysterectomy for myomata! In the section of Public Medicine, the President, T. W. Grimshaw (afterwards Registrar-General for Ireland) dealt exhaustively on every moot point then engaging attention in the advance of sanitary science. J. Paterson Cassells, in opening the sub-section of Otology, referred to it as a "memorable occasion, seeing that the subject of otology had received for the first time a distinct recognition in the proceedings of any Medical Congress in the country." On August 5th an important meeting was held in the waiting-room of the Eye, Ear and Throat Hospital, at which a large number of ophthalmologists were present, when it was resolved to suggest to the Council that in future a sub-section of Ophthalmology should form part of the programme of the annual meeting.

What a galaxy of scientific workers did not the meeting bring together! In Medicine, amongst others, Clifford Allbutt, Henry Bennet (the real originator of the "open-air" treatment), who read a paper on "Mountain Air Treatment of Phthisis"; W. H. Allchin, Borchardt, J. Barr, James Little, J. W. Moore, Southey, Squire, W. J. Collins, Norman Kerr, Walter Foster, Octavius Sturges, Mrs. Garrett Anderson, Saunby, Coupland, Donkin, W. Wade, J. M. Finny, Drysdale, Henry MacCormac, George Duffey, Sigerson. In Surgery: W. Adams, Edward Bennett, Antony Corley, R. W. Parker, Brodhurst, J. Cooper Forster, Wm. McEwen, Wm. MacCormac, Thomas Jones, Teevan, Mapother, W. Thomson, Edmund Owen, W. Spanton, W. Wheeler, George Wheelhouse, Robert McDonnell, R. Barwell, Berkely Hill. In Obstetrics: Lombe Atthill, Robert Barnes, C. J. Cullingworth, R. Kincaid, E. Malins, Tilt, W. S. Playfair, Arthur Macan, More Madden, W. Walter, Robert Edis, Dill, Graily Hewitt, Aveling. In Psychology: H. Dill, Herbert Major, Rabagliati, Hack Tuke, Rayner, Murray Lindsay. In Dermatology: Thin, Malcolm Morris, P. S. Abraham, Walter Smith, Wyndham Cottle, Colcott Fox. Jonathan Hutchinson (unavoidably absent) contributed a paper to open the discussion on "Lupus." In Ophthalmology: W. Brailey, Bell Taylor, E. Nettleship, J. Wolfe, C. E. Fitzgerald, A. H. Jacob, D. Little, G. Walker, W. McKeown, H. R. Swawzy, J. B. Story, Vose Solomon, E. Andrew. In Public Medicine: J. Notter, Littlejohn, Alfred Carpenter, Ballard, Chapman, H. Tweedy, Meymott Tidy. In Otology and Laryngology: Morell Mackenzie, Lennox Brown, F. Pierce, E. Woakes, Kirk

Duncanson. America sent Seguin, G. Beard, Rooke Ley, Wetzel, W. H. Byford, Laurence Turnbull, J. Hogden, Louis Yandell, Evanovitch, H. Horton, McCord, and L. H. Sayre. Australia sent R. Peel and H. Gilman. France sent Charcot, Ball, Bonnafont, Gueneau de Mussy. Germany sent Weber Liel and Hirschberg. Italy sent Pacchiotti; Switzerland, Cordes. But no such meeting could hope to be conducted to a successful issue without the aid of the permanent officials, and Ernest Hart (Editor), Alfred Carpenter (Chairman of Council), Alexander Henry (Sub-Editor), and Francis Fowke (General Secretary) were an invaluable back in any difficulty. A feature of the meeting apart from the pathological and the annual museums, was a special Sanitary Exhibition, to which exhibits were sent by firms from different parts of the United Kingdom, and in its six subsections the most recent improvements in sanitary appliances were shown. It is also noteworthy that then, for the first time, was Cork in part lit by electricity. Having a local guarantee from Messrs. Perrott of engine power, I made arrangements with the Société Générale d'Electricité, of Paris, to bring over sufficient plant to light up the approaches to the College and the College itself by the Jablochkoff system. This was done at the President's *conversazione* the first night, a marvellously smart piece of electrical work, and, on the next, all the approaches to the Opera House were lighted for the Mayor and citizens' *conversazione* in the same way.

Surgeon-General (afterwards Director-General) Sir Thomas Crawford received the gold medal of the Association for Surgeon Reynolds, the hero of Rorke's Drift. Important discussions were opened in all the sections, a few of the principal being:—"The Diagnosis and Treatment of Joint Diseases," "Subcutaneous Osteotomy," "Alcohol in Fever," "Lupus and Its Treatment," "Intra-Uterine Medication," "Intra-Tympanic Medication," "Cataract Extraction," "Glaucoma," "Mydriatics," and "Myotics." One of the events of the meeting was the interest aroused by Richard Norris's *ignis fatuus* hunt for the third corpuscular element in the blood. The columns of the *Journal* of the Association to the close of the year contained valuable papers that were read during the meeting. These were days before the Röntgen method of examination, the modern means of exploring the respiratory and digestive tracts, present-day cystoscopy and exploration of the ureters with kidney catheterisation, local and spinal anæsthesia, and Wright's opsonic method, could be availed of to assist in diagnosis or treatment. Serum and anti-toxin treatment was only in its early infancy; the whole array of synthetical remedies now in use was unknown; the modern surgery of the brain and nervous system had not commenced; the same might be said of the abdomen and the abdominal viscera; the peritoneum was still a bugbear, and the sacred immunity of the appendix and the bowel from the surgeon's knife yet existed; prostatectomy and the operation of Freyer had no place in text-books; radical ear operations were confined to trephining of the mastoid cells; MacEwen had not written his classical work; gynaecology was a term only coming into use, and the surgery of the adnexa had just had its start through Battey and Lawson Tait. Dermatology had not the Röntgen-ray or radium to assist in treatment; the older specific remedial methods were employed in syphilis; and there had not come into existence a host of new names associated with the classical features of various diseases not then differentiated or even recognised. This is but a glimpse at what these thirty years have done for medicine and surgery.

And so the Cork meeting passed off after a delightful week of hospitality and entertainment. The reception committee gave a dinner to some hundred of the officers and principal guests on the Monday. Nearly 2,000 attended the President's reception at the College on the Tuesday. The Mayor, Corporation, and citizens held a brilliant *conversazione* on the Wednesday. The entire of those attending, with their friends, were entertained at a luncheon at Besborough House by the late Ebenezer Pike on the Thursday. Over 300 sat down at the annual dinner that evening, when I was placed standing on the dinner table to return thanks for the

reception committee. On the Friday there was a garden party in the beautiful grounds of the College, and in the evening a concert was given in the Assembly Rooms, at which the proverbial beauty and musical talent of Cork were fully appreciated. A little incident of that concert was the admiration evoked when those two giants, Louis Yandell, of Louisville, and William MacCormac came in linked arm-in-arm, representing America and Ireland. Both had seen military service, one in the American Civil War and the other in the Franco-Prussian. No two more splendid types of physique could be imagined. Both were in their prime, though that same night I sat up with Yandell through a sudden bad attack of ague from malaria contracted in the war.

On the Saturday I accompanied one hundred visitors down the Irish Rhine, and the Duke of Devonshire hospitably entertained them at Lismore Castle. Sir George Colthurst generously received fifty at historic Blarney Castle. One hundred were taken by steamer to see the harbour, and the reception committee provided a *déjeuner* at Queenstown; others were invited on a trawling expedition by the Rev. W. Green, while another, the largest party, were taken to Killarney, and, having been driven through the Gap of Dunloe, were provided with luncheon at Durricunnihi Cottage and then were rowed through the lakes, being brought back to Cork the same day. With characteristic generosity, Messrs. Musgrave, of Belfast, subsequently to the meeting, provided luncheon baskets for an excursion to the Giant's Causeway, and the Naval authorities courteously sent a gunboat, while Mr. Walter Bernard, of Londonderry, acted as local secretary for a five days' excursion through picturesque Donegal.

Thus ended a famous meeting, having many other interesting events which I could chronicle, only that space does not permit. To three surviving younger aids to that meeting, now distinguished members of the Profession in Cork, I would desire, in conclusion, to say that I do not forget their help—Dr. P. J. Cremen, Dr. Gelston Atkins, and Professor Yelverson Pearson.

## ON IMMUNITY. (a)

BY PROFESSOR ELIE METCHNIKOFF,

Of the Pasteur Institute, Paris.

[SPECIALLY REPORTED FOR THIS JOURNAL.]

I PRESENT myself in conformity with paragraph 9 of the statutes of the Nobel Trust in virtue of which every recipient of a prize is, if possible, to deliver at Stockholm, within six months of the award, a public lecture on the subject thereof.

Inasmuch as I had the honour, in common with my friend, Professor Ehrlich, of receiving the Nobel prize in medicine "for researches on immunity," this is the subject I propose to discuss. Now the study of immunity is a chapter of theoretical medicine, and as such is necessarily somewhat difficult to deal with before a public audience. But the theoretical problem in question has for object the resistance of the organism to disease, and as everything that relates to health is of interest to the public at large I shall take advantage of this fact to make my arguments as clear and simple as possible, if only to convince you of the importance of theoretical research.

It is not necessary to be a doctor or to have studied science to wonder how the human organism is able to resist the many injurious agents that threaten our existence daily. You must all have remarked that in families, the members of which are exposed to the same danger, and among troops and in schools where everyone lives under the same conditions, disease does not attack everybody indiscriminately. Some fall victims while others display relative immunity.

In years gone by only the vaguest reply could be given in answer to the inquiry as to the reason of this remarkable resistance of the organism, but since the ever memorable discoveries of Pasteur and his school, who discovered the means of affording immunity by vaccinating with microbes, the question

(a) Address delivered at Stockholm under the provisions of the Nobel Trust.

has been greatly simplified. It has become possible to study the subject by the experimental method. Pasteur, who was a chemist, explained the fact that the intact organism did not allow of the development of certain morbid agents by assuming that the chemical composition of the medium was unfavourable thereto. Just as plants will not grow on a soil which lacks some substance indispensable to their development—so microbes, the microscopical plants which cause infective diseases, are incapable of multiplying in an organism which does not provide them with the substances necessary to their well-being.

This theory, though quite logical, was however in contradiction with many facts met with in the immune organism. Pasteur and his assistants ultimately recognised this when they found that infective microbes develop freely in the blood of animals which are perfectly immune.

The animal organism is very complicated, so that it is difficult to explain in a simple manner what takes place inside it. To do this another plan had to be adopted. The problem had to be approached from the biological point of view, endeavouring to simplify the conditions without going outside the limits of the living organism. This is the idea that has guided us in our researches. Since disease is not the exclusive privilege of man and domestic animals it was only natural to try to ascertain whether the lower animals, whose organisation is simpler, manifested pathological phenomena, whether in fact one could observe in them cases of infection, cure, and immunity.

To work out this problem it was necessary therefore to work at it from the point of view of comparative pathology.

In the course of investigations into the origin of the digestive organs in the animal kingdom we were struck by the fact that certain elements of the organism which do not take any part in the digestion of food are nevertheless capable of seizing foreign bodies. This we imagined was due to the fact that these elements at one time shared in the digestive functions. I cannot go into this question now, but shall merely bring before you the general outcome of our investigations in this direction, viz., that the elements of the organism of man and animals possessed of individual movement and capable of englobing foreign bodies are merely the remains of the digestive system of primitive beings.

In certain of the lower animals, transparent enough for it to be possible to examine them alive, one sees in their interior a large number of tiny cells provided with mobile prolongations. The least injury to these animals is followed by an accumulation of these cellular elements exactly at the damaged spot. In little transparent larvæ it can be seen that the mobile elements, gathered together at the site of injury, often enclose foreign bodies.

These data, confirming on the one hand our views as to the origin of these migratory elements, suggested, on the other hand, that their aggregation in the neighbourhood of a lesion constituted a sort of natural defence of the organism. Means had to be devised to verify this hypothesis. At that time, now upwards of 25 years ago, I happened to be at Messina. I took to studying the floating larvæ of star fish, larvæ that were discovered for the first time on the shores of Scandinavia, and known as *bipinnarea*. They are big enough to allow of various operations, yet they are transparent enough to allow of their being watched under the microscope while still alive.

I introduced splinters into the bodies of these *bipinnarea*, and the next day I found a thick layer of mobile cells round the foreign body. The analogy of this phenomenon with what takes place when a man pricks himself with a splinter, followed by inflammation and suppuration, is very striking, with this difference, that in the larvæ of the starfish the accumulation of mobile cells takes place without the intervention of the blood vessels or nervous system, for the simple reason that they do not possess either. The accumulation must therefore be the outcome of spontaneous action on their part.

The process just described is, so to speak, the first step of inflammation in the animal world, but as met with in man and the higher animals this process is

almost always the consequence of the introduction of some morbid organism. This fact militates in favour of the hypothesis that the afflux of mobile cells towards damaged parts represents the reaction of the body against foreign bodies in general, and pathogenic microbes in particular. Looked at from this point of view the disease becomes a struggle between the morbid agent, the microbe from outside, and the mobile cells belonging to the organism. Recovery follows when the cells carry the day, and immunity is evidence of their possession of sufficient energy to prevent the intrusion of microbes.

This deduction required to be verified by exact observation and experiment, and fortunately man and the higher animals are not the only beings liable to infectious disease; indeed, these must have existed long before the appearance of human beings.

To confirm the accuracy of our hypothesis we had to discover a being belonging to the higher walks of animal life, small and transparent enough to be kept under microscopical observation, and also liable to microbial attack.

After various attempts in this direction it was found possible to study the course of an infection in fresh water animals commonly known as water fleas. A disease to which these tiny crustaceæ are liable is that caused by the minute organism which is peculiar in that it produces needle-shaped spores. When swallowed by the water flea, or *Daphne*, these spores readily pierce the intestinal walls and find their way into the body. Once inside the flea the presence of these spores causes an accumulation of mobile cells corresponding to the white corpuscles of human blood. A struggle takes place, sometimes the one, sometimes the other, remaining victorious.

These data constitute the basis of the theory which I will now proceed to formulate. Having established the basis of this theory of immunity, we had to apply it to higher organisms; in fact, to man. It was obviously impossible to resort to direct microscopical observation, so we were fain to have recourse to more complicated procedures combining the results of researches on the blood and organs removed from the body, and associating them by an intellectual process, a mode of reasoning that exposed us to manifold sources of error.

The investigation of various infectious diseases in man and the higher animals tended to confirm the results of observation of what takes place in the lower, transparent animals. In every instance in which the organism enjoyed immunity inoculation with microbes was followed by the accumulation of mobile cells, the white blood corpuscles in particular, which enveloped the microbes and destroyed them. These cells were distinguished as "phagocytes," i.e., voracious cells, while the function of immunity as a whole was called "phagocytosis."

It has been established that, as a general rule, in all cases of natural or acquired immunity, either by preventive vaccination or following an attack of the disease, phagocytosis was very active, while in fatal or severe cases of infection this phenomenon either did not take place at all, or was ill-marked. This rule was first demonstrated in animals inoculated with the bacillus of anthrax. When the anthrax bacillus is introduced beneath the skin of animals sensitive thereto, such as rabbits or guinea-pigs, the microbe lies free in effused liquid, in which there are few or no white corpuscles. When animals that have been immunised are inoculated, a very different state of things is observed. Within a short time the bacilli are seized by the white corpuscles, which promptly assemble at the site of introduction, and are destroyed, usually within a few hours.

Later on, the same rule was found to apply to a number of infective maladies, and was confirmed by the study of pathogenic microbes discovered after it had been formulated. In bubonic plague, for instance, whenever the organism proved refractory the bacillus was found to have been devoured and destroyed by the phagocytes, while in the fatal cases most of them were free in the body fluids, and multiplied *ad lib.* So far, we have not come across a single exception to this rule. It is true that Mr. Weil, of Prague, asserted that in cases of immunity to fowl cholera the refractory

organism defended itself against the threatened invasion by means other than phagocytosis, basing his belief on the impossibility of finding this microbe inside the white corpuscles of animals which, however, had resisted the disease. This exception is only apparent, and is to be explained by the fact that this excessively minute organism readily escapes recognition. Soulima has investigated this matter most carefully in my laboratory, and he has established beyond question that the usual law applies here as elsewhere.

The adversaries of the theory of phagocytosis held for a long time that the white corpuscles, and phagocytes in general, were only capable of seizing upon microbes that had already been killed by the humours, *i.e.*, by the blood plasma and effused liquids. No one however, defends this view at present, for it has been conclusively shown that the phagocytes do actually invest living microbes still capable of provoking fatal infection in organisms not possessed of immunity.

These results, which I have briefly stated, were only obtained after long years of patient observation and discussion. Many authorities still held to the ancient idea that white corpuscles were something inimical to health. Formerly, when suppuration took place, the pus being particularly rich in white corpuscles, and the microbes too small to be seen, it was supposed that these corpuscles themselves constituted the disease. When, later on, the presence of microbes was demonstrated within these cells, it was asserted that the white corpuscles provided food for, and assisted in disseminating, the infective agents, and the destruction of the latter was ascribed to the body humours.

The theory of the bactericidal action of the humours was evoked in opposition to the theory of phagocytosis.

The immune organism was credited with the power of destroying infective microbes without the assistance of the living cells. This view was based on certain well-known experiments, in which blood and blood serum taken from the organism proved capable of killing large numbers of infective microbes. Although almost from its inception this humoral theory of immunity had to face numerous grave objections, it secured many active partisans, and it received a special measure of support from Pfeiffer's discovery of the destruction of the comma bacillus in the abdominal cavity of animals immunised against the disease. In this instance the cholera bacilli met their fate not inside the phagocytes, but in the fluid exuded into the peritoneal cavity. For years it was asserted that this instance was no exception to a general rule, but was itself the general law of immunity. Nevertheless, after years of laborious investigation, it has been definitely established that the great majority of infective microbes cannot possibly be destroyed by the body liquids, and that the instance of the comma bacilli could be explained by their extreme fragility. It was asserted, on the other hand, that the destruction of the comma bacilli by the body fluids was effected by bactericidal substances that had escaped from the white corpuscles into the peritoneal cavity. In cases where the same microbe was introduced in regions where there were no pre-existing white corpuscles, the bacilli met this fate inside the phagocytes that had come to the rescue. Even in the abdominal cavity extra-cellular destruction of the comma bacilli could easily be avoided by preventing the white corpuscles opening and discharging their bactericidal contents. This experiment, which was long contested by various observers, was ultimately settled by Beil, of Prague. It may consequently be taken as proven that if the white corpuscles remain intact the destruction of the comma bacilli within the organism takes place inside the phagocytes.

Close scrutiny of the phenomena met with in immunity amply demonstrates the fact that phagocytosis is truly a defensive act on the part of the organism against infective agents. Several former partisans of the purely humoral theory of immunity subsequently rallied to the theory of phagocytosis, but with various important reservations, with the result that we had several intermediate theories, according to which the threatened organism brought every means at its disposal to bear—phagocytes and humours—immunity resulting from the destruction of part of the microbes in the plasma, while the more resisting were swallowed by the phagocytes.

In this defensive scheme the organism is supposed to employ two categories of bactericidal substances, some of them circulating in the blood fluid, passing thence into the exudation that forms round the microbes, while others only exist inside the phagocytes. The first act especially on the cholera vibrio, the typhoid bacilli, and their congeners, while the others destroy the anthrax bacillus, the pyogenic microbes, etc.

In conformity with the two different bactericidal functions of the organism, the nature of the substances that destroy the microbes is also assumed to be different. The humoral bactericidal substances are stated to be of a complex nature, comprising a substance which, though not directly injurious to microbes, renders them amenable to the action of the substance that kills them. These two substances have been baptised several times over. Ehrlich gave the name *amboceptor* to the preparatory substance, and *complement* to the one that destroyed the microbe. In order not to further complicate a question that is complicated enough as it stands, I shall adhere to these two terms, although I do not share the views of my illustrious *confrère* on the intimate rôle of these two substances.

Whereas formerly—that is to say, more than ten years ago—various authorities asserted that the bactericidal substance, properly so-called, although circulating in the blood, was nevertheless secreted by the white corpuscles, of late the contrary view makes itself more and more heard. They admitted readily enough that the complement had nothing whatever to do with the white corpuscles, having an entirely different origin. This view is based on numerous researches carried out by the aid of extracts of white corpuscles taken from the organism. With this object in view, we take an effusion very rich in these corpuscles, these are well washed to get rid of the liquid parts, and then they are killed by exposure to cold and left to macerate in normal saline solution. Extracts of white corpuscles thus prepared do not contain any complement capable of killing microbes, a statement which has been verified over and over again. This, however, does not warrant the conclusion that white corpuscles do not give rise to the complement.

In order to arrive at an opinion on this much-debated point, Dr. Lavidité and I set to work to investigate the bactericidal properties of white blood corpuscles. We found, to begin with, that when withdrawn from the organism, these cells are perfectly capable of enveloping and destroying microbes in large numbers. We made use of Denike's vibrios, something like the microbes of Asiatic cholera, and we had no difficulty in witnessing their transformation into granules inside the white corpuscles of guinea-pigs. This transformation took place promptly with vibrios that were impregnated with the amboceptor or preparatory substance, a change indicative of their destruction. The white corpuscles, therefore, possess within them a substance which acts exactly like the complement of the humours. Now let us see how it behaves in liquids which do not contain this bactericidal substance, and which contain a plentiful supply of white corpuscles containing the complement. All we have to do is to keep these elements for twenty hours, by which time we shall find that they have become absolutely incapable of effecting the transformation of vibrios laden with amboceptor. The corpuscles have had time to die, for the most part, and, this being the case, the vibrios remain intact.

This experiment, repeated several times over with the same result, shows that the complement in the white corpuscles is a highly unstable substance. It is certain, therefore, that prolonged washing, refrigeration, and maceration of the white corpuscles is amply sufficient to destroy the complement, and this is a reason for rejecting such methods of investigating the state of the bactericidal substances of the white corpuscles.

It must not be imagined that the action of the complement is only manifested during the life of the white corpuscles—that is to say, is a purely vital phenomenon. On the contrary, it is in all probability a chemical action, which changes according to the state

# IRISH POOR-LAW AND LUNACY INTELLIGENCE,

Being the Supplement to the "Medical Press and Circular."

WEDNESDAY, JULY 28TH, 1909.

**Notice to Correspondents.**

Poor Law Medical Officers and other subscribers to THE MEDICAL PRESS AND CIRCULAR are invited to make use of the facilities provided by the Management of the Journal for obtaining information on all matters connected with the Poor-Law Medical Service or the Medical Profession generally in Ireland.

The Editor will be glad at all times to receive letters or marked copies of newspapers dealing with matters of medical interest. All communications must be addressed to the Office of the Journal, 18 Nassau-street, Dublin, and should be delivered not later than Saturday morning to ensure attention in the issue of the following week.

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**EVENTS OF THE WEEK.**

We report in another column the decision of Mr. Justice Johnson in certain cases brought before him at the Limerick Assizes, in which the Rathkeale Guardians had appealed against the decision of the County Court Judge in granting decrees to Dr. Hayes and Nolan for the recovery of fees for the examination of lunatics. The Judge reduced the fees in each case to one guinea, holding that the cases presented "no unusual difficulty." His Lordship thought himself well paid at a guinea in ordinary cases when practising as a barrister, and apparently thought no one else should be paid at a higher rate. We have no means of valuing Mr. Justice Johnson's services as a barrister, nor do we wish to suggest that he himself at all undervalues them. Nevertheless, he is not as much at home in medical as in legal work, and is not, therefore, quite competent to judge what sort of case is an "ordinary case," and what presents "unusual difficulty." We must emphasise the fact that no case of examination of a lunatic is an "ordinary case," and no case demanding the attention of a medical man requires more care, or demands greater responsibility of judgment. It is a serious matter to commit a man to an asylum as a dangerous lunatic, and medical men who have to certify in such cases should be paid for the meticulous care they have to exercise, and the responsibility they have to assume. The work is in no way comparable to that of the guinea barrister, who has not

responsibility either to the client or the public. Moreover, whatever Mr. Justice Johnson's custom may have been, we know few barristers who would be content with a fee of one guinea in cases requiring the care, caution, and knowledge, demanded from a medical man in the examination of an alleged lunatic.

**FEES FOR TEMPORARY SERVICES.**

At a recent meeting of the Carrick-on-Suir Guardians the Clerk read the following:—

South-Eastern Branch.

Irish Medical Association,

Portlaw, July 2nd, 1909.

At the meeting of the above body, held at Clonmel on June 2nd, the following resolution was unanimously adopted: "That in consequence of the refusal of the Local Government Board to sanction a greater amount than four guineas per week for temporary services in dispensary districts in cases in which exceptional circumstances make this amount insufficient remuneration for such services, the branch requests its members that none of them should act in such cases unless he previously receives in cash from the Relieving Officer such amount per day or per week, as would be reasonable expense for the work to be done until the Local Government Board amends its procedure. Copies of this resolution to be sent to each branch of the Association, the Chief Secretary, the Clerks of each Union, etc.

J. QUIRK, Hon. Secretary.

This Branch has adopted a sound plan, which ought to be followed by others throughout the country.

**GRADED SCALE IN SHILLELAGH.**

The Guardians of the Shillelagh Union have adopted a graded scale of salaries for their medical officers.



### TYPHOID FEVER, IN TIPPERARY.

A serious outbreak of typhoid fever has occurred in the Currahaba district of County Tipperary within the past couple of weeks. Some thirty or forty patients have been admitted to the Thurles Hospital, and fresh cases are still occurring.

### LUNACY FEES.

At the County Limerick Assizes a number of cases at the suit of Doctors Hayes and Nolan, the Medical Officers of Rathkeale and Shanagolden Dispensary Districts, against the Rathkeale Guardians, were heard before Mr. Justice Johnson. The cases were appeals by the Guardians from decrees given the doctors by the County Court Judge at the Rathkeale April Sessions for the amounts claimed by them for examining persons charged as dangerous lunatics who were committed to the Limerick Asylum within the present year.

His Lordship, after hearing the evidence of Doctors Hayes and Nolan, Mr. T. B. Naughton, Clerk of the Union; Head Constable Brosnan, Rathkeale, and Sergeant Davis, Ballingarry, said that as the cases were of great importance to the medical profession he would reserve judgment until Wednesday morning. At the opening of the Court on Wednesday, his Lordship said he had carefully considered the cases affecting the medical profession, and he entirely concurred in the judgment delivered by the Lord Chief Justice and Mr. Justice Wright in Dr. King's case, and entertained no doubt whatever but the expenses incurred previous to the committal of the persons charged should come out of the £2 in each of the cases in which the justices allowed the maximum sum. These cases presented no unusual difficulties to the doctors concerned; there was no danger of their being subjected to personal violence, and he was in favour of the opinion expressed by the Lord Chief Justice and Mr. Justice Wright in Dr. King's case, that one guinea would be reasonable remuneration, where no unusual difficulties presented themselves, and especially when the doctors had not to go beyond the police barracks in their district. His Lordship remarked that when practising at his profession he considered he was fairly well paid in ordinary cases when he received one guinea; and, no matter what the medical profession might think of his judgment, he was obliged to reverse the decision of the County Court Judge in all the cases, and allow the doctors one guinea to each case, both the appellants and respondents to pay their own costs, and he would allow no expenses to either side.

At the sitting of the Assize Court on Thursday, Mr. Kelly, B.L., mentioned to Mr. Justice Johnston that he had received a wire from one of the doctors concerned in the cases for medical fees for certifying lunatics, saying that he would like if his Lordship stated a case.

Mr. O'B. Kelly, B.L., said that could not be done after the decision.

His Lordship said similar cases may arise before the next Assizes, and his decision only applied to cases at the present Assizes.

Mr. Kelly intimated his satisfaction with his Lordship's reply.

### WESTPORT UNION.

#### CLARE ISLAND.

At the meeting of the Board of Guardians of Westport Union the following letter from the Local Government Board was read.

"The Local Government Board have given the Guardians' proposal careful consideration, and having regard to all the facts and local circumstances they are of opinion that a case has not been established to justify the appointment of a separate medical officer for the Islands of Clare and Inishturk, and that the islands in question should continue as heretofore to form portion of the Louisburgh Dispensary District.

"The Board, therefore, propose to sanction the appointment of Dr. James J. McGreal, who has been elected by the Guardians on the 13th May last, as Medical Officer of the entire Louisburgh Dispensary District, but they would suggest that the Guardians

should consider whether instead of paying him a salary of £150 a year to cover his dispensary duties, including a weekly attendance at Clare Island he should be paid a salary of £120 a year as dispensary medical officer, and allowed in addition £1 for each attendance given by him at Clare Island not exceeding £50 a year.

"There is a resident midwife on the island, for midwifery cases, and the medical officer is bound to attend with all due dispatch upon midwifery and other urgent cases as they arise there from time to time.

"A special meeting of the Guardians should be convened to deal with the suggestions as to medical officer's remuneration and his weekly attendance at Clare Island.

"I am, Sir, your obedient servant,

A. R. BARLAS, Sec.

The Chairman said they were asked to hold a special meeting to consider the suggestion that Dr. McGreal should be allowed £1 per visit to Clare Island, instead of £50 a year.

It was decided to adhere to the existing arrangement, allowing £150 for the entire district.

It appears from the report of Sir A. McCullagh that no sanitary accommodation for patients exists at any of the Dispensaries in Westport Union.

Dr. Maguire and Dr. Heneghan wrote stating that they would not approve of the recent Tuberculosis Notification Act being put in force in the Union, and the Board unanimously agreed not to put the Act in force.

### BALLINA UNION.

The Local Government Board has sanctioned the decision of Ballina Dispensary District, and issued a sealed order for the appointment of a second Medical Officer.

### THE URBAN COUNCIL AND THE WORKHOUSE WATER SUPPLY.

The Chairman said the committee went up to the Workhouse last Friday week, and before going up were buoyed up with the hope that they would find a mare's nest. They decided first to test the pressure outside the gate, and took a good deal of trouble in doing so, and the pressure only amounted to 7lbs., which was absolutely insufficient to supply even the basement of the Workhouse with water. Something would have to be done to get a proper supply of water. Dr. Macaulay told him none of the houses in Francis Street got a supply when the watering cart went out.

Dr. Macaulay holds that it is our first duty to scrape the main, and to do it if possible at night so as to give as little inconvenience as possible.

Mr. Chambers: But even with the scraping a seven-inch main is not sufficient to supply the town.

Chairman: However, we adjourned the scraping till the middle of September.

For years this totally inadequate Water Supply has been a scandal and grave public danger. For years the Guardians have been complaining and passing resolutions, at length the Urban Council summoned up sufficient courage to appoint a committee. Result, as usual, nothing to be done.

### RATHDRUM UNION.

At the last meeting of the Rathdrum Guardians, the first business taken up was the proposal to increase the salaries of the medical officers.

The Clerk read a recommendation of the committee as follows:—"The committee recommend that an immediate increase of £25 a year be granted to each medical officer who has five years' service; we do not recommend a retrospective scale."

The Local Government Board wrote that section 3 (2) of the Probate Duties (Scotland and Ireland) Act, 1888, enacted that all sums paid to the Board of Guardians of a Union pursuant to that Act shall be applied in aid of the poor rate, and therefore no portion of the Estate Duty Grant can be regarded as specially earmarked to recoup expenditure in respect of medical officers. The only fund to which these salaries are chargeable is that created by section 58 (1) of the Local Government Board (Ireland) Act, 1898, and under sub-

section 2 (a) (1) of that section, one half such salaries are payable through the county councils to the Boards of Guardians. A limitation to recoupment in respect of the Guardians' expenditure under all heads of sub-section 2 (a) was imposed, however by section (6) (1) of the Local Government Act, 1902, and the provisions of this latter section are always operating in the case of Rathdrum Union.

The Local Government Board wrote relative to the proposal of the Guardians to grant Dr. O'Keeffe, medical officer, Newcastle Dispensary District, an allowance of £30 a year until a residence is provided, and pointing out that Dr. O'Keeffe's outlay in providing house accommodation is only £30 a year, and that there did not appear to be any sufficient reason why he should be allowed £30 a year for house rent. If the Guardians considered his present salary inadequate to enable him to pay house rent they could deal with the matter in connection with the proposal to adopt a scale of graded salaries for the medical staff of the union.

The Chairman said the Guardians would be glad to hear any statement the doctors had to make.

Dr. Hamilton, Arklow, said he laid certain figures before the committee that day fortnight, but he was not quite sure of some of them, and he asked the clerk to correct them. He had gone to the trouble of looking up the Probate Duties Act of '98, and he had the figures that Mr. Manning got from the secretary of the County Council. In Rathdrum Union there were nine medical officers whose salaries were £120 each, which amounted to £1,080. Half of that was refunded, leaving £540 to be met by the Guardians in respect of salaries. But in addition to that under the Probate Duties Act 51 and 52, Vic. Cap. 63, a certain sum of money was apportioned to the poor-law unions to meet expenses under the Medical Charities Act, which included doctors' salaries and educational expenses. Their proportion for last year amounted to £788, and according to his reading of the figures the amount which they had to pay to the doctors was £1 13s. 4d. a year each. As a matter of fact in his (Dr. Hamilton's) opinion the guardians had to pay nothing to the doctors, but were actually making something by them (laughter, and applause). He hoped that was true (hear, hear). The increase would have to come out of the rates. The increase plus the present salaries the doctors were receiving would work out at about a halfpenny in the £, and if they were not worth that they were worth nothing.

Mr. Joseph Byrne—I would not like to give some of the doctors a halfpenny.

Dr. Hamilton, continuing, said that according to the present proposal by the time he would reach the maximum of £200 a year, Dr. Ryan would be high up in heaven (laughter); and by the time Dr. Ryan would receive the additional £40 a year he would be about 100 years of age (laughter). Even when the maximum salaries were reached the cost to the union would still be under 1d. in the £. The labourer was worthy of his hire. They were all Irishmen, and some of them natives, and they would all like to be able to live in their own country and not be going away to foreign countries. As a body the doctors were the worst paid public officials in the country. In the town he lived in the district inspector of police got £95 a year for a horse and car, but the medical officers got no such allowance.

Mr. Short—And they have far more important work.

Dr. Hamilton said in another year the medical officers' services would be State services. He was sorry for it, and voted against it at the Medical Congress. He would be sorry to part from the guardians. The salaries they would receive in future would be based upon the salaries the guardians gave them. As he said before he would be sorry to part from the guardians, but if they must part they would be glad to part with the best salaries they could get (loud laughter).

The Chairman said in the Gorey, Shillelagh, and Baltinglass Unions, the doctors were receiving increased salaries. There was no doubt the doctors' salaries were very low for the duties they had to perform. With regard to the statement made by a guardian that he would not give a halfpenny increase to some doctors,

he (chairman) said if a doctor was not doing his duty it was the duty of the guardian of the division to report the matter. The fault in that respect lay with the guardian, who was the only person the poor had to look to.

It was decided, on the motion of Mr. M'Grath, seconded by Mr. Carey, to ask the doctors to withdraw while the guardians were considering the matter.

The following doctors who were present then retired: Dr. Ryan, Dr. Taylor, Dr. Hamilton and Dr. Lynch.

Mr. P. J. Carey proposed that as the committee's recommendation did not seem to meet with the approval of the Board, that every doctor with over five years' service receive an immediate increase of £20 a year, and that he receives an increment of £5 after every five years until the maximum is reached.

Mr. Hagan seconded the proposition.

Several Guardians said at that rate the maximum would never be reached.

After some discussion, Mr. Carey agreed to amend his proposal so that the increment of £5 should be given every three years.

Mr. Ellison suggested that the increment every three years should be £10.

The Chairman suggested that they should split the difference, and make the increment £7 10s. every three years.

Mr. Carey refused to accept the amendment.

A show of hands resulted in the defeat of the proposal to make the triennial increase £7 10s.

Eventually Mr. Carey's resolution was passed by the majority of the guardians.

#### ATHY UNION.

At the meeting of the Athy Guardians a letter was read from the Local Government Board stating that the Board desired to inform the Board of Guardians of Athy Union that they have received the report of their Medical Inspector, Surgeon Colonel Edgar Flinn, relating to the inquiry on oath recently held by him into a charge of neglect of duty preferred by Mr. J. B. Alexander Bosanquet against Dr. J. Kilbride, Medical Officer of the Athy Dispensary District, in the case of children named Devereux. The Board considered that the explanation given by Dr. Kilbride was not unreasonable, and may be accepted. The complaint that the medical officer had been rough in his manner towards Devereux and his wife was not, the Local Government Board consider, proved by the evidence.

#### SPREAD OF SCARLATINA.

At the last meeting of the Rathdown Rural District Council a letter was received from Dr. Cahill, Medical Officer of Health in the Dundrum district, who wrote in reference to the epidemic of scarlatina, that parents were in the habit of allowing children suffering from "rashes" to go about without having consulted a doctor as to the nature of the rash. There was a prevalent opinion among the poorer classes that the child must be "real sick" if scarlatina is present, whereas the type of the disease most commonly met with nowadays was very mild, and led to little discomfort or apparent illness; Dr. Cahill suggested that a number of leaflets containing simple directions bearing on the subject should be printed and distributed in the district.

Dr. Usher, J.P., said that mild cases of scarlatina were very liable, unless the proper treatment was applied in due time, to become extremely serious cases. What should be impressed upon the public was that scarlatina was scarlatina, and had to be treated as such whether it appeared in a mild or an aggravated form.

It was decided to adopt Dr. Cahill's suggestion, and issue printed notices on the subject.

We are glad to see some of the rural councils taking steps in such a practical way to give instruction to the people.

#### SWORN INQUIRY IN NAAS.

The treatment of a man named Patrick Doyle, a native of Kilcullen, while an inmate of the Naas Workhouse Hospital, was the subject of a sworn

inquiry held by Surgeon-Colonel Edgar Flinn, Local Government Board Inspector, at Naas, on Tuesday. The inquiry was ordered on a complaint made by Thomas Doyle, a brother of Patrick, who died in the hospital on the 21st May last.

Thomas Doyle stated that the deceased complained to him when he visited him, that he had been put into cells for ten days and nights for breaking over the wall. Another allegation the deceased made was that the Master shortened his days by putting him in a cell when he was an hospital case, and spitting up blood.

The Master, Mr. Shiel, stated that the deceased came to the hospital as an influenza case, and was afterwards returned as suffering from phthisis. He then related the circumstances under which Doyle was placed in the cell.

#### AN AMBUSH.

About 8.30 on the evening of the 2nd February he ascertained that deceased was in Naas, and he was aware he had not got a pass. The porter, Constable Kenny, Wardmaster Hannan, and witness went to the boundary wall about 9 or 9.30, and waited there. After a short time the porter found Doyle in the act of getting over the wall, and witness asked him his name, which he gave as Thomas Johnston. Doyle was

searched, and they found on him two half-pints of whiskey, some tobacco, and 3s. 5d. in cash. He presented the appearance of being under the influence of drink, and witness went to the nurse in charge of the hospital, Sister Agnes, and told her of this, and she said he had gone out without leave, and that she could not allow him back into the ward. He was then put into the cell. The cell had no fireplace or window; it was about 80 yards from where there would be an attendant. There was a straw bed—in a tick—and there were bedclothes—two blankets. The cell was about 9 or 10 feet long by 4½ feet wide, and had a wooden door. Doyle was locked in the cell, and he (the Master) did not tell anyone to look after him specially for the night.

The Master was questioned as to why he did not put the man into the casual ward, where there was a fire, and the answer was that it being half-past nine the fire would be out. Further pressed on this point, the witness gave as a reason that Doyle was under the influence of drink. He would not have put him in the cell if he had thought he was suffering from lung trouble.

Dr. Coady, Medical Officer of the Workhouse, said considering the man was suffering from phthisis, he did not think it was wise to put him in a cell. He did not, however, consider the night in the cell had any ill-effects.

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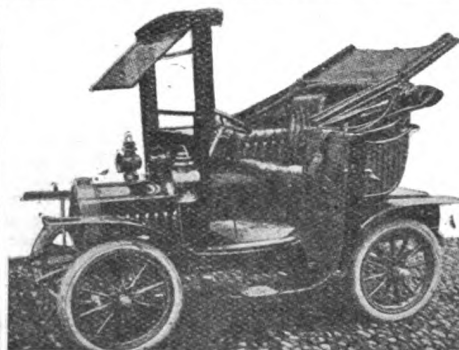
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of the white corpuscles. Here is an analogous instance in support of this view.

The great masses of living matter found in certain mushrooms, the "myxomycetes," are, like the white corpuscles, capable of enveloping and digesting foreign bodies in their vacuoles. The latter are filled with an acid juice which favours digestion, its reaction being easily demonstrated by presenting this living matter with fragments of blue litmus, which soon turn pink. Now, without killing the living protoplasm, the slightest damage by pressure causes the litmus to turn blue again, this being due to the living matter being permeated with an alkaline substance which, on the slightest injury, penetrates the vacuoles and neutralises the acidity. This is an example of a purely chemical reaction intimately associated with the life and integrity of living matter. It may be asked, however, why this action of the complement is so fugitive in white corpuscles, while it lasts so much longer in humours withdrawn from the organism, such as blood serum. The difference is believed to be due to the fact that the white corpuscles, in addition to the complement, contain still another anti-complementary body which prevents the action of the former, just as the myxomycetes, alongside of the acid juice, contain alkaline substances.

Without going further into detail it may be stated that white corpuscles are vastly more complex than they appear at first sight, and that the method of treating them *en bloc* for preparing extracts is about as coarse a method as if we were to crush entire mice or frogs in the endeavour to estimate their digestive powers.

As the outcome of experiments which cannot be gone into here we adhere to our view that the complement of the humours is derived from the white corpuscles. When these are slightly injured they allow the complement to escape into the liquid medium, whereas, if more seriously injured, they give issue to a substance that neutralises the action of the complement. We are enabled to quote well-established facts in support of this assumption, for instance, in an immune organism the white corpuscles of which remain intact, the vibrios do not undergo granular degeneration in the humours, and only assume the granular form inside the white corpuscles.

We are arguing in favour of the identity of the complements contained in the phagocytes with those of the blood serum. Do there exist, apart from the complement, substances exclusively and intimately bound up with the white corpuscles? No definite answer can be given to this question for the time being on account of the extreme technical difficulty of the investigation, but this appears to be highly probable as shown by the experiments carried out by Petterson and others in respect of *endolysines* (Petterson) or *leukines* (Schneider).

Independently of this delicate problem it is well established that the microbicidal property of the humours is limited to very fragile microbes, while that of the white corpuscles and of phagocytes in general, extends to all infective agents to which the organism is immune.

(To be concluded in our next.)

## ON CERTAIN ASPECTS OF MEDICAL JOURNALISM. (a)

By DAVID WALSH, M.D.,

Senior Physician, Western Skin Hospital, London, W.; Physician to the Kensington and Fulham General Hospital, &c.

THE medical journal of to-day is accepted by most of us as a familiar fact; but there is much in its history, as well as in its habits and its environment, that will repay discussion. By a process of specialisation it has evolved into a distinct species of that mass of ephemeral literature which we term modern journalism. Its characters are sharply defined. Amongst them it reports progress, not only at home, but also of the whole world, from China to Peru; it registers the ever-changing relations between medicine and the State;

(a) Address read by proxy before the Annual Meeting of the Association of American Medical Editors, Philadelphia, June 1st, 1909

it exposes the injurious methods of the charlatan, and in a thousand other ways protects the health of the community; it forms a central exchange, so to speak, for medical views and opinions; and, lastly, it records the domestic happenings of the great professional family, of which it is in many senses the guide, philosopher and friend.

But while it is true that the medical journal of to-day holds up the mirror to a world of wide activities, we cannot overlook the fact that it is a species of late development. It is emphatically an offspring of modern environment, conceived of the unceasing intellectual energy of mankind, born of the printing machine, rendered possible by the post office, and nurtured by the aid of a progressive profession.

### EARLY DAYS OF MEDICAL JOURNALISM.

The *Lancet*, the pioneer of medical journalism, first saw the light of day on Sunday, October 5th, 1823. It was issued weekly, at the price of sixpence, and consisted of some 30 crown-octavo pages. In its preface the editor says:—"It has long been a matter of surprise and regret that in this extensive and intelligent community there has not hitherto existed a work which would convey to the public and to distant practitioners, as well as to students of medicine and of surgery, reports of the Metropolitan Hospital Lectures." The contents of the new journal, however, were of a much more catholic nature than the foregoing remarks might suggest, for they included long criticisms of plays, table talk of a diversified nature, reports of criminal trials, general news unconnected with the profession, humorous anecdotes, and chess problems.

The readers of the *Lancet*, however, were evidently not dissatisfied, for we find that after a year's existence the editor was able to announce that "Our success has exceeded our most sanguine expectations." It is interesting to recall the fact that for the first ten years the *Lancet* "was a duelling ground for a series of fierce encounters between the editor and the members of the privileged classes in medicine." (a) At that period all the chief medical and surgical appointments were in the hands of a carefully organised clique, who did not hesitate to stigmatise the outspoken editor of the new venture as a literary pirate and a disseminator of moral garbage. The trouble did not end there, for in the first decade of his editorial experience Wakley was engaged in no fewer than ten law actions, six of which were for libel. In these latter a sum of £8,000 was claimed as damages, and an aggregate sum of £155 6s. 0½d. was awarded, while the costs were defrayed for the most part by public subscription. A great deal of interesting information regarding the *Lancet* can be obtained from the excellent "Life of Thomas Wakley," written by Dr. Squire Sprigge, who has lately succeeded to the editorial chair. The contrast between the *Lancet* of 1824 and that of 1909 is no less marked in quantity than in quality. The modest crown octavo of 30 pages has grown to 70 or 80 pages or more of handsome double quarto, with an equal number of pages of advertisement. The *Lancet* is read all over the world, and enjoys a princely income apparently.

The second oldest weekly medical journal is THE MEDICAL PRESS AND CIRCULAR, the Dublin editor of which is Dr. H. Jellett, of Dublin, while the London editorship is in my own unworthy hands. It appeared first in 1838 as the *Dublin Medical Press*, and was amalgamated in 1866 with a small London weekly, the *Medical Circular*. The journal was then called by its present name; it is of quarto size, published mid-weekly in London, and sold at fivepence. It has always been distinguished by a tone of fearless but impartial criticism, and it has lived long enough to see the accomplishment of many of the reforms advocated in its columns.

There is no need here to do more than mention the *British Medical Journal*, with its weekly volume of scientific, literary, and general editorial matter. This journal, which has probably the largest medical circulation in the world, is under the able direction of Dr. Dawson Williams, assisted by Dr. Frederick Taylor.

(a) "Life and Times of Thomas Wakley." By S. M. Sprigge, M.D. London: Longmans. P. 81.

Nor is there any need to allude individually to the rest of our medical journals, weekly, monthly, quarterly, special and general, many of them no less excellent in matter than in manner. During the past generation a good many such journals have come into existence, but not a few have passed away after a more or less brief sojourn upon the professional stage. The majority have owed their origin to some busy medical man, who has devoted his spare energies to that most fascinating of pursuits, the creation of a modern journal.

#### THE SUPPRESSION OF QUACKS AND QUACKERY.

One of the noblest crusades that could be fought by a medical journal has always seemed to me to be that against quacks and quackery. If the mission of scientific and practical medicine be to foster the health of the community, that function could hardly be fulfilled to better purpose than by exposing the fraudulent practices whereby and whereon the charlatan waxes fat at the expense of his fellows. From the outset of medical journalism this subject has been singled out above all others for editorial onslaught. It must be confessed, however, that this output of energy has not been hitherto attended with the success to which it is entitled.

British law is riddled with absurdities when it comes to dealing with unqualified medical practice. Provided he does not assume the title of doctor, and does not actually sell medicines, any quack may set up as a bone-setter, a cancer-curer, a specialist in the treatment of eyes, nerves, skin or any other part of the human body. If an unqualified person assume the title of doctor, he can be prosecuted under the Medical Acts. That offence, of course, it is easy to steer clear of, much more so, in point of fact, than the further offence of selling medicines, for which a prosecution may be brought under the Apothecaries Act. As a matter of fact, our Medical Acts are so badly drawn that they utterly fail so far as concerns the protection of the British public against quackery, and practically for many years past the only penal control in that direction has been through the limited powers conferred by the Apothecaries Act. There can be little doubt, nevertheless, that under the existing common law, apart from special Acts, a great deal might be done to check the evil. During the past few years the police have successfully prosecuted a few of our most notorious quacks. The charge by means of which they have laid these gentry by the heels is the extremely clear and simple one of obtaining money by false pretences. That method of procedure has been strenuously advocated for many a year in *THE MEDICAL PRESS AND CIRCULAR*, and in other medical journals. What we really want is some responsible central authority whose duty it shall be to prosecute all such offenders systematically and automatically, just as any other rogues are controlled. There must be something rotten in a system of criminal law administration which sends to prison a man as a vagabond, who has no visible means of subsistence, or who asks for alms when he is starving, but which at the same time permits a quack to extract money and to put his victims to unutterable, and it may be fatal, pain and misery, on pretence of curing their maladies. With a strong police administration to enforce the principle that a quack, like other persons, must abide by his published undertakings, and by his contracts, and must give proper value for money received, it is likely that, under such adverse conditions, this terrible evil of quackery would be speedily abated, if not altogether rooted up and cast into the fire.

Meanwhile, the evils wrought by proprietary nostrums and by bogus practitioners have been ruthlessly exposed, not only by the medical but by several lay journals. In spite of repeated exposure, however, the tide of successful quackery probably never ran higher than it does at the present moment. Of late a cry has been raised for more drastic methods, and most of all for that truly British forerunner of legislation, a Royal Commission. That instrument of State investigation is often singularly efficient in collecting facts and in educating both public and legislators as to the needs of any given case. It has been advocated for many years past in the columns of *THE MEDICAL PRESS AND CIRCULAR*, and has been forcibly laid before

the British Medical Association by Mr. Henry Sewill. That demand has been forestalled by one of our Colonies—to wit, New South Wales, which, in 1908, issued a monumental report detailing the results of a Royal Commission upon the sale of proprietary medicines. The official document in question must become a classic for all future reformers in that important field of work, more especially in the English-speaking world. America is concerned in this report almost as much as England, for quackery is ubiquitous, and, with the aid of the post office and the newspapers, scours the whole world in search of victims. One has only to glance through a few pages of that volume to realise the vast amount of fraud and cruelty inflicted upon the community by the charlatan, who is endless in his shifts and his trickery, as he is heartless beyond words in his greedy cynicism. Take, for example, the brazen effrontery with which one firm sends out all over the world for the treatment of drunkenness a remedy made up for the most part of raw and inferior spirit. Could anyone imagine a more reckless defiance of the ordinary rules of ethical conduct than to sell such stuff under such circumstances to persons trying to break away from that very poison? The incident reminds one of the famous phials, said to contain blue, yellow, and white electricity, which some years ago were introduced by an Italian Count and sold extensively in the United Kingdom and elsewhere for the cure of cancer and other diseases. These parti-coloured nostrums were taken up strongly by a leading English journalist, and by various members of the nobility. For a time it almost looked as if Society were to be divided into two classes, those who believed and those who did not believe in the claims of the Italian nobleman. At length the bubble was happily pricked by the publication of an official analysis, which showed that the phials, regardless of their colour, were one and all filled with water, pure and simple. Both drink curer and cancer curer, it may be noted, agreed in their high price, in their absolute disregard for the ways of ordinary morality, in their trust in the credulity of mankind, and, above all, in their single-hearted confidence in the virtue of advertisement.

In that last-mentioned point lies more or less the pith of the whole matter. Modern quacks and modern quackery, with their train of appalling evil, could not exist without the support of newspaper advertising. The money spent yearly in obtaining publicity for proprietary medicines and worthless methods of treatment is simply enormous, and until the lay Press will consent to relinquish that source of income, it seems well-nigh hopeless to attempt reform in other directions. This aspect of the question has been recognised in America, and not long ago a note in the *Journal* of the American Medical Association announced that the *St. Paul Pioneer Press* had decided to sweep its office clear of offensive advertisements. (a) At the same time, the proprietors appeal to the public and to medical men to support them in their attempt to publish a clean newspaper. It is to be hoped that the profession in America will do all they can to help forward so laudable an enterprise. Were the medical men of any civilised country to take up persistently the cause of the lay newspaper that refused quack advertisements, the fame and fortune of many a journal could speedily be made or marred. Our influence as a profession is exercised upon every class of society, and it is not unlikely that if medical men insisted upon the expurgation of objectionable advertisements from the public Press, that the proprietors and editors thereof would sooner or later find themselves compelled to fall into line with their views.

There is another weapon of attack against the quack advertisement evil. If the selling of secret remedies on the strength of claims that cannot be established constitute the offence of obtaining money under false pretences, then the newspaper which publishes the false statements must surely be guilty of joining in a conspiracy to defraud, and be thereby equally liable to public prosecution.

In the United Kingdom there is a strange lack of official machinery for the defence of the community

(a) *The Journal*, May 15th, 1909. P. 1599.



against quacks and quackery. It is not the business of the General Medical Council; it is not the business of the qualifying corporations (except in the limited instance of the London Apothecaries' Company); it is not the business of the police; and it is apparently only in extreme and rare cases the business of the Public Prosecutor.

The evil has existed since the dawn of accurate and systematic medical knowledge. Fresh parasites appear for every fresh branch thrown out from the parent stem of science. Your up-to-date quack is a shrewd fellow, ever on the look-out for a smart commercial application of the latest medical advances, be they radium, sinusoidal currents, or what not. As a rule, however, he trusts to some simple drug, which may be powerful, mild, or inert—it matters not to him which—but he gives it a fancy title and claims to cure therewith sciatica, epilepsy, locomotor ataxy, cancer, and any or every other disease, curable or incurable, that can attack mankind. At times he resorts to methods of such glaring absurdity that one would think they would not be able to secure a single customer. Yet such devices as metal rings for the cure of rheumatism, and socks for drawing the same disease out through the feet, are advertised year after year at a cost that could be defrayed only by a large and flourishing business connection.

Pretenders of this class spend large sums in advertising, but it is not easy to understand how any honourable man, as editor, can continue to circulate these misleading statements when once their real nature had been pointed out to him.

Our ancestors gave short shrift to some of the charlatans, for in the time of King Henry VIII. the President of the Royal College of Physicians of London was empowered by law to prosecute all persons in the metropolis who pretended to cure diseases without the proper qualification. That useful provision was suspended by the introduction of the Medical Acts of 1858, and, unfortunately, no efficient prosecutor was therein substituted. Our mediæval forbears recognised even at that comparatively early period of medical knowledge the necessity of excluding quacks, and the revival of so excellent a principle appears to be vital to the present protection of the public against the bogus practitioners and the vendors of worthless, dangerous and fraudulent nostrums who prey upon them by night and by day.

One reason why the quacks have hitherto escaped punishment as a whole is undoubtedly due to a peculiar sort of sympathy which exists in minds of a certain order towards bonesetters, herbalists, and other irregular practitioners. That feeling, however, has not saved the quack dentist from the clutches of the law. So stringently have the Dentists' Acts been administered of late in the United Kingdom that for an unqualified person even to advertise sets of artificial teeth or painless extractions is now a punishable offence, inasmuch as it it held to imply legal qualification. One magistrate said in so many words he thought it admissible for an unqualified man to exhibit a case of teeth and to put up his name, but nothing more. He fined an unqualified dentist £20 and 5 guineas costs for affixing a notice outside his place of business to the effect that he "was not registered under the Dental Act of 1878," on the ground that he thereby implied qualification elsewhere. On the whole, there can be little doubt that the day of the quack dentist is drawing to a close so far as the United Kingdom is concerned. That happy result is chiefly due to the campaign instituted by medical and dental journals, a fact that is encouraging in the campaign against the infinitely more nefarious and more deadly practices of the quack and the quack medicine proprietor.

Through all the tragedy of this unhallowed traffic with the health and the lives of mankind, the medical journals have maintained a firm attitude of condemnation. Who can doubt that one day the collective commonsense of mankind will confirm their view, and will drive out the unqualified medical pretender from their midst, just as in our own country they have practically driven out unqualified lawyers, dentists and veterinary surgeons? As a simple question of political economy, the sweeping away of quackery by the saving in the life and health of citizens, not to mention the

diversion of money from unproductive into productive channels, must infallibly add to and conserve the national wealth in a way that would speedily recompense the necessary disturbance of vested private interests.

#### "DE QUIBUSDEM ALIIS."

So much has been said about the pirates of medicine that little space is left for others that are the common-places of medical journalism. Amongst such burning topics may be mentioned the decline of the birth-rate, infantile mortality, the campaign against tuberculosis, infant teething, one-portal qualification, faith-healing, anti-vaccination, anti-vivisection, medical inspection of school children, and the notification of measles. Then there is the scientific side of the work, always an important matter. As every medical editor knows, many medical men who are highly skilled observers fail when it comes to the question of literary expression. Some authors resent the slightest alteration of their text, while others gratefully adopt any suggestions as to form, and it is sometimes hard to say which of the two is the more embarrassing from the editorial point of view. In one particular the editor requires to exercise the greatest care and prudence, namely, in the rejection of scientific communications. The medical world of to-day is apt to reject, more or less contemptuously, that which is new and heterodox, as it was when Harvey was given the cold shoulder for his views about the circulation of the blood. In some medical journals it is the custom to keep a sort of scientific censor, whose duty it is to determine whether any given article is to be accepted or otherwise. Although there is something to be said in favour of this plan, it nevertheless seems undesirable to run the risk of limiting the progress of medicine by the introduction of personal factors. Censorship of the kind should be applied sparingly. Of all things, scientific progress is the one that depends most upon vigorous breadth and freedom of mind. Science requires free trade in intellectual wares, and history has shown us again and again that discoveries of the utmost value have come from the least likely quarters.

A few words may now be said about the medical editor. One need hardly remark that it requires a man of peculiar gifts to fill that position successfully. It by no means follows that because a medical man has achieved a distinguished scientific and professional career he will necessarily make a good and capable editor. As a rule there can be little doubt that he should be engaged in some branch of active professional practice, as otherwise he is likely to lose touch with the complex world with which he has to deal. He should be well grounded in general principles, in order that he may view fresh advances in their proper perspective. Before he has long occupied the editorial chair, it will become clear to him that the large proportion of his professional brethren think that Nature has endowed them to a pre-eminent degree with the gifts and faculties required for discharging the duties of his position. The editor must be versed in the editorial side of his work, and be able to select suitable subjects for discussion and comment; he must keep a keen eye on reports, reviews, medical news, correspondence, and a number of other matters of current interest to his readers. Then it goes without saying that he must not disregard the business interests of his journal, or he will come into collision with the publishing side of his management.

One of the chief risks ahead of the medical editor is the highly technical nature of his proof sheets. To bring a medical journal to anything like perfection in this respect is to achieve no mean thing. One might fill pages with recollections of the havoc wrought by printers' errors; but it will suffice to give one in which a compositor made the editor say that a certain distinguished man had treated a subject in his usual "nonchalant" way, whereas the real epithet was "trenchant."

A passing word may be given to the poet who plies the editor with doggerel upon every conceivable subject, in season and out of season. His emotional nature becomes unduly elated if his verses are published in small print at the end of the journal, and he waxes sarcastic, or even stops his subscription when his rhymes are rejected. The varieties of this par-



ticular phase of the disease *cacoethes scribendi* may be classified by some authority on mental alienations, and it is in that case to be hoped that he may be at the same time successful in providing a cure for what has hitherto proved a distressing, and, in most cases, a hopeless malady.

In conclusion, it may be remarked that the interests of medical journalism, like those of medical science, are cosmopolitan, and America has built up a system of medical journals of which the English-speaking world may well be proud. Whatever the future may have in store, we may at all events be sure that the medical journals of America, no less than of the United Kingdom, will worthily uphold the traditions of a great and noble profession.

## OPERATING THEATRES.

### ROYAL FREE HOSPITAL.

OPERATION FOR CARCINOMA OF THE RECTUM.—MR. J. P. LEGG operated on a man, æt. 65, who had been admitted on account of passing blood and slime in his motions. Since the summer of last year he had been suffering from constipation, but from time to time had attacks of "diarrhoea," the latter being chiefly due to passage of mucus. Since February, 1909, there had been blood in the motions, never in any great quantity, but usually some appreciable amount. During this time he had lost weight, but otherwise he was in good health. On examination per rectum, a large crateriform ulcer was found, occupying the posterior and left walls of the rectum; the anterior and right walls were free of disease. The ulcer extended a couple of inches up the bowel, and the lower margin of it was just inside the sphincters, about  $\frac{1}{4}$  in. from the skin of the anus. The bowel above the ulcer was healthy, and there was no stricture; moreover, the parts were movable on the deeper tissues, and no enlarged glands could be detected in the hollow of the sacrum. The edges of the ulcer were raised and hardened; the base was irregular and nodular, very friable, and bled easily. Nothing abnormal was detected in the abdomen; the liver was not enlarged, and he had no urinary symptoms. On July 3rd left inguinal colotomy was done, the loop of sigmoid being brought to the surface through the rectus muscle, which was split for the purpose for a distance of 2 in. in the direction of the fibres of the muscle. One stitch was passed through the mesentery, and the upper and lower ends were fixed to the angles of the parietal incision. On July 11th the sigmoid was opened, and subsequently all fæces were passed by the colotomy opening. In order to clear that portion of the bowel between the anus and the colotomy opening of any fæcal material or mucus, it was washed out by means of an irrigator, the nozzle being placed in the lower segment of bowel at the colotomy opening, and a soft tube passed per anum enabled the fluid to flow freely away and wash out this segment of bowel. The object of this proceeding was to have the rectum as clean as possible at the time the excision was done. On July 15th the patient was again anaesthetised and placed in the left lateral position, the buttocks being raised on a firm sandbag. A median incision was made from the anus to the lower end of the sacrum, the coccyx, being clear of its muscles, was removed, and the dissection continued till the rectum was exposed in the upper part of the wound. Next an incision was made all round the anus, and the lower part of the rectum was separated by dissection chiefly with scissors from the prostate in front, and the ischio-rectal fossa laterally; the insertion of the levator ani into the rectum was divided, and the separation of the rectum continued in an upward direction, taking care to keep as far away from the bowel as possible, and yet not to injure the bladder. After a little while it was possible to pull down the rectum, so that it could be severed a couple of inches above the upper limit of the growth. To enable this to be done, one or two vessels and bands of fibrous tissue passing from the front of the sacrum required division; the peritoneum was not opened. After the bowel had been completely freed, two clamps were placed on it, and it was divided between them.

The cut margins of the opening in the upper portion of the rectum were then united by two layers of sutures. The first layer, which was put in before the clamp was removed, passed through the whole thickness of the bowel wall, and the second row consisted of two or three interrupted sutures which invaginated and buried the first line of suture. Two drainage tubes were placed in the wound, one at the upper end just below the sacrum, and one at the lower end of the incision, which was then closed with interrupted sutures.

Mr. Legg said that in considering the question of operation in such cases as this one, the first part to consider was whether the patient's symptoms were such as to indicate either a palliative operation alone, or whether it was possible to rid the patient of his disease. In this patient the latter course was possible because the disease was apparently limited to the rectal mucous membrane, and had not infiltrated the surrounding parts, and there was no evidence of secondary growths elsewhere. Having decided on a radical operation, the next thing for consideration was the method of operation, and perhaps the most important point was where to place the new anus, and Mr. Legg had very little doubt that in the majority of cases an artificial anus in the left iliac region was the best. It was placed in a convenient place for the patient, and by splitting or separating the muscular fibres of the abdominal wall, a certain amount of control was very often obtained, especially if, in doing the colotomy, care was taken that a good spur was formed. With a sacral anus such a control was not usually possible. There is often also some prolapse of the bowel, and an anus in the sacral region was not nearly so convenient from the point of view of the patient's attention to his bowels, and keeping himself in a comfortable state. Moreover, it was more easy to fit a belt or other instrument in the left iliac region than in the sacral. In this patient, the lower margin of the growth being so close to the sphincter, it was obvious that this must be destroyed in the removal of the rectum, so that here no question arose of being able to bring down a cut upper end of the rectum and suturing it to the normally placed anus, and in many cases where this is feasible the amount of control over the motions is not perfect; therefore, Mr. Legg thought that for these reasons it was generally desirable to do a preliminary colotomy some days before the removal of the rectum. Another advantage of such a colotomy was that the wound left by the excision not being contaminated by fæcal material passing over it, healed more satisfactorily and in a shorter time. The colotomy should always be done into the highest part of the sigmoid, which should be opened, in the absence of symptoms such as vomiting or abdominal distension, in about a week's time. It is only necessary to make the opening sufficiently large to allow the contents to escape freely, and when the colotomy is acting satisfactorily (which is usually in from four or five days to a week), the removal of the rectum and growth may be done; thus, on the average, this will be ten days to a fortnight after the colotomy has been performed. The method of excision of the rectum which should be employed is determined by the position of the growth. When the latter is low down, the operation he had just performed gave a very satisfactory exposure of the parts, and was really a combination of the perineal and Kraske's operation, the coccyx only being removed. The method of completely closing the cut lower end of that portion of the rectum left behind was of great value, and prevented the large wound becoming infected. It was safe to do this, as the upper end of this portion of bowel was patent at the colotomy, and any secretion or fæcal material which might accumulate in this loop would be washed away by means of irrigation. Mr. Legg also pointed out that this case showed the necessity of examining digitally all cases of rectal disease, for this patient had been treated for some months by one medical man with medicines without any such examination, and it was only because he was not improving that he consulted a second doctor, who at once made such investigation and discovered the presence of the carcinomatous growth. It was only when one got these patients in

the early stages of their disease that it was possible to do a radical operation; hence the necessity of rectal examination in cases of chronic diarrhoea or constipation.

## TRANSACTIONS OF SOCIETIES.

### ROYAL SOCIETY OF MEDICINE.

#### OBSTETRICAL AND GYNÆCOLOGICAL SECTION.

MEETING HELD JULY 8TH, 1909.

The President, Dr. HERBERT SPENCER, in the Chair.

A SHORT communication on a

CASE OF NON-OVARIAN PELVIC DERMOID TUMOUR

was read by Miss FRANCES IVENS, M.S.

She pointed out that dermoid tumours originating in the pelvic connective tissue, non-ovarian in origin, are apparently of infrequent occurrence, and that she had only been able to collect 29 reported cases.

Gebhard, when commenting on the rarity of these tumours, points out their tendency to be of a somewhat simpler structure than the highly complex ovarian dermoids, hair and teeth being of infrequent occurrence.

Their origin is uncertain, and symptoms when present have been chiefly due to pressure on adjacent pelvic organs. Repeated attacks of pelvic inflammation have usually occurred. The case recorded by the author was that of a married woman, æt. 26, nulliparous, who was admitted to the Liverpool Stanley Hospital complaining of severe pelvic pain. It caused her great pain to sit down, and also during defæcation: she had suffered, but to a less degree, from attacks of a similar nature during the past seven years. A fixed, tender fluctuating swelling, the size of a goose's egg, was felt high up in the left fornix, and was thought to be a pyosalpinx or ovarian abscess. A few days later some substance, like thick matter, was said to have been passed per rectum. Laparotomy was performed, and the tumour was then found to be beneath the peritoneum and in front of the rectum, and to have no connection with the uterus or appendages. The peritoneum over it was incised, and the tumour shelled out and removed entire. No drainage was employed. On examination of the cyst it was found to contain a buttery material of an apple-green colour and very offensive odour, and the cyst wall, which was thick, presented at one point a softened area where it probably had intermittently communicated with the rectum. The cyst was lined with granulation tissue, from which all traces of epithelium had disappeared. The patient, who exhibited some alarming symptoms indicative of toxæmia for the first few days, ultimately recovered, and left the hospital well.

Dr. G. E. HERMAN said that he had, in a lecture published in *The Clinical Journal* of August 22nd, 1900, p. 277, recorded a case of a pelvic dermoid not ovarian, which suppurated whilst the patient was recovering from an uncomplicated ovariectomy. In a paper on "The Suppuration and Discharge into Mucous Cavities of Pelvic Dermoid Cysts," published in vol. xxvii. of "The Transactions of the Obstetrical Society of London," 1885, p. 254, he had collected a number of cases, some of which he thought were certainly not ovarian.

Mr. ALBAN DORAN desired to know Miss Ivens' opinion about the origin of the dermoid. It was not probable that the dermoid elements arose from displaced ovarian tissue, but it seemed very likely to be the homologue of the dermoid cysts occasionally found in the abdomen of men, as in Ord's case recorded in the 63rd volume of the "Medico-Chirurgical Transactions," where the tumour was closely related to the bladder and rectum.

Dr. F. H. CHAMPNEYS said that he had seen one similar case. The tumour lay between Douglas's pouch and the sacrum, was about the size of an orange, and had no apparent connection with either ovary. It came into notice first during labour,

caused considerable obstruction, and the patient died of sepsis.

The PRESIDENT (Dr. Herbert Spencer) asked whether it was possible that the tumour was a degenerated fibroid. He had met with a case in which he had enucleated a tumour per vaginam from Douglas's pouch. The pulsatious contents led him to think it was a dermoid. He had to open the abdomen for oozing, and found that it was a fibroid which had grown from the back of the lower segment. Examination of the tumour with the microscope showed it to be a cystic fibro-myoma. He had several times observed the solidification of the contents of degenerated fibroids (from clotting), and this he thought might be mistaken for the setting of the liquid fat of a dermoid.

Miss IVENS regretted that she had not seen the paper by Dr. Herman on the suppuration and discharge into mucous cavities of dermoid cysts of the pelvis, and mentioned that her communication referred entirely to retro-peritoneal dermoids. In answer to Mr. Doran's question respecting the origin of the cyst, Miss Ivens said she believed it to be derived from foetal remnants, probably the post-anal gut or projection of the hind gut behind the proctodeal depression. Replying to the President that no hair or skin lining could be seen, she said that the diagnosis rested on the greasy character of the contents, which though liquid on removal, solidified to the consistency of butter on cooling. After repeated attacks of suppuration extending over a period of seven years, it was unlikely that the original lining of the cyst could be demonstrated.

PRESIDENT'S VALEDICTORY ADDRESS.

Dr. HERBERT SPENCER then delivered a valedictory address to mark the close of his term of office as President of the Section.

### CENTRAL MIDWIVES' BOARD.

The Central Midwives' Board met on Thursday last, July 22nd. There were present Dr. Champneys, in the chair, Dr. Stanley Atkinson, Mr. Golding-Bird, the Hon. Mrs. C. Egerton, Sir George Fordham, Miss Paget, Sir Wm. Sinclair, and Mr. Parker Young.

Inquiries had been received as to quarantine to be imposed on pupils coming from hospitals of the Metropolitan Asylums Board. It was agreed that the following conditions should be observed: (a) Adequate disinfection before leaving a fever hospital; (b) a period of quarantine lasting one week to safeguard patients against incubation of a fever in the nurse.

A letter signed "G. P.," appearing on pp. 1153 and 1154 of the *British Medical Journal* of May 8th, 1909, complaining of the conduct of a certified midwife, was further considered. A letter on the subject from the Secretary of the Medical Defence Union, and a statement by the writer of the letter signed "G. P.," with the observations of the Executive Officer of the Local Supervising Authority thereon, were also considered. The Board decided that as the midwife has already been reprimanded by the Local Supervising Authority for the error she committed, and as in other respects the statements of "G. P." do not appear to be substantiated, no further action be taken in the matter.

Miss Jane Holland Turnbull, M.D., B.S., was placed on the list of Supernumerary Examiners. Arthur Knight Gale, M.R.C.S., L.R.C.P., was approved as Teacher. It was agreed that the request of the Devon and Cornwall Training School to hold the written examination locally be granted.

### OPHTHALMIA NEONATORUM.

A long discussion and a sharp division of opinion resulted from the consideration of another recommendation. The Local Government Board sought the Board's opinion as to precautions favoured by the London County Council in order to guard against the recurrence of ophthalmia neonatorum, and inquired in particular "whether the use by the midwife of a weak solution of nitrate of silver is advisable for infants born of mothers suffering at the time of birth from a vaginal discharge." The Committee recommended a reply in the following form:—"(a) That in the opinion of the Board it would not be advisable to order

midwives to drop any fluid into the child's eyes as a matter of routine; (b) the dropping of antiseptic chemical fluids into the conjunctival sacs by midwives in cases of suspicion of gonorrhœa, etc., is a practice to which the Board does not object where the midwife has received proper training, but the Board does not pledge itself that nitrate of silver is always the most suitable form of application."

On the discussion of Section A, Sir WILLIAM SINCLAIR at once expressed his absolute opposition to a proposal which he believed would result in serious harm, morally and socially. He moved, and Mr. PARKER YOUNG seconded, an amendment to omit the concluding words "as a matter of routine."

Miss PAGET pointed out that the broad effect of the amendment would be to necessitate the revision of the whole of the teaching of midwives, a contention which she supported by quoting from the regulations of several leading hospitals and from a number of midwifery text-books. It was very confusing to midwives, she urged, to be taught to do things which they were afterwards forbidden to do.

Sir WILLIAM SINCLAIR retorted that the facts adduced by Miss Paget afforded a strong argument in favour of the Board issuing a text-book of its own. On a show of hands the amendment was defeated.

The second part (b) of the recommendation was next considered, and some minor amendments were introduced after further protests from the minority, Sir WILLIAM SINCLAIR declaring that he would not be a party to a proposal which displayed ignorance alike of pathology and practice.

Mr. PARKER YOUNG moved a final amendment to omit section b, contending that by it the Board would be setting up two classes of midwives. By four votes to two this amendment was also rejected.

When, however, the CHAIRMAN put the same section as a substantial motion, Dr. ATKINSON expressed the view that they were bound to give weight to the opinions so strongly urged by Sir William Sinclair, and, to the Board's general amusement, the motion failed to obtain any support. Sir William and Mr. Parker Young duly recorded their votes against it, and the section which had been the subject of so much amendment and discussion was accordingly excised altogether.

A further recommendation of the Committee dealt with the subject in a more general way, and it was decided, with the object of minimising the risk of the occurrence of inflammation of the eyes in new-born children, to amend Rules E 14 and E 19, and, on the Privy Council's authorisation of those amendments, to issue a leaflet to midwives in explanation of the alterations. The draft of that document was approved with some changes after Miss PAGET had urged, on behalf of the midwives, that a really full and complete leaflet should be sent out.

The next general meeting of the Board will not be held until October 7th.

## SPECIAL REPORTS.

### ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

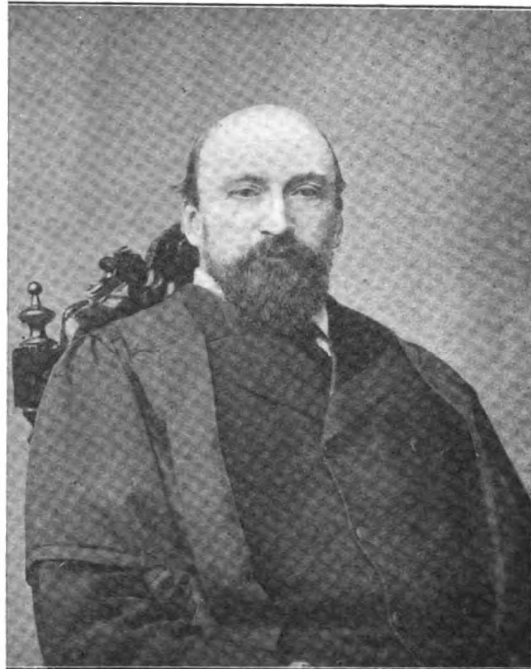
Belfast, July 26th, 1909.

[FROM OUR SPECIAL CORRESPONDENT.]

SIR WILLIAM WHITLA, M.A., M.D., LL.D., J.P., the President-Elect of the British Medical Association, was born in Monaghan in 1851, and educated there and in Queen's College, Belfast. He graduated in Medicine with highest honours and a gold medal, and afterwards had the degree of M.A. *hon. caus.* conferred upon him by the Royal University of Ireland, and in 1905 he received the high honour of the degree of LL.D. *hon. caus.* from Glasgow University.

He was appointed Physician to the old Royal Hospital, Belfast, in 1882, where he soon distinguished himself by his success as a teacher, and when, in 1890, Dr. Seaton Reid retired from the chair of Materia

Medica and Therapeutics in Queen's College, there could be no question as to the fitness of Dr. Whitla to succeed him. He is now Senior Physician to the Royal Victoria Hospital, the successor of the old Royal Hospital, and is also Consulting Physician to the Ulster Hospital for Children and Women, and to the Belfast



SIR WILLIAM WHITLA, PRESIDENT-ELECT.

Ophthalmic Hospital. Other posts which he either holds or has held are Senator in the Royal University, Examiner in Glasgow, the Victoria, and the Royal Universities, President of the Ulster Medical Society, President of the Ulster Branch British Medical Association, President of the Irish Schools' and Graduates' Association, and Senator in Queen's University, Belfast.

Notwithstanding the claims of a large consulting practice and the duties of his many posts, Sir William Whitla has found time to write, and has attained marked success as an author. His "Materia Medica and Therapeutics," first published in 1882, is now in the eighth edition, and his "Dictionary of Treatment," published in 1892, has run into four editions, not only in England, but also in America and China.

The Ulster Medical Society owes to Sir William Whitla a deep debt of gratitude, for through his generosity the Society possesses a most comfortable and commodious home, with rooms for meetings, committees, library, and amusements, in the Medical Institute. This was built entirely at his own cost by Sir William Whitla, and opened by His Excellency the Lord Lieutenant (Lord Dudley) in 1902. When the honour of knighthood was conferred by His Majesty at his Coronation on Dr. Whitla, the medical profession of Belfast and Ulster generally received the news with genuine pleasure, and as the premier medical knight of the city he worthily maintains the honourable traditions of the profession. When it was decided to invite the British Medical Association to meet in Belfast, he was unanimously chosen as President-Elect. He assumes office on Tuesday, 27th inst., and, judging from the programme, he will establish a record for open-handed Irish hospitality.

#### GENERAL ARRANGEMENTS.

AFTER an interval of twenty-five years, the British Medical Association is again meeting in Belfast, and many and marked are the changes that have occurred since the last meeting. The President then was the late Dr. James Cuming, and the numbers attending

were only 563. The Association has increased greatly since then, and the numbers attending the annual meetings have increased proportionately. This year it is expected that nearly a thousand will register, and as about four hundred ladies will accompany them the preparations for local hospitality have to be on a generous scale. All the sections are accommodated in Queen's College, which is a great convenience and saving of time to those who move about from one to another, and all the necessary offices are also in the College. The exhibition of instruments, drugs, etc., is in the exhibition hall, which adjoins the College grounds. The representative meeting is most comfortably housed in the Assembly Hall, Fisherwick Place, where also the Presidential Address will be delivered. Academic dress is to be worn on three occasions—at the President's Address, the Lord Mayor's Reception in the Town Hall on Thursday night, and at the Ulster Branch Reception in the Botanic Gardens on Friday night. His Excellency the Lord Lieutenant and Lady Aberdeen have accepted invitations to many of the meetings and social functions, the former being an Honorary Member of the Association since the Montreal meeting in 1897.

#### THE SECTIONAL MEETINGS.

Of the fifteen sections, nine are presided over by outside men and only six by local men, so that Belfast cannot be accused of being greedy in making the arrangements. The sections and their presidents are as follows:—Medicine.—Professor Lindsay, Belfast. Navy, Army and Ambulance.—Fleet-Surgeon Lloyd Thomas, R.N. Obstetrics and Gynaecology.—Dr. John Campbell, Belfast. Ophthalmology.—Dr. J. Walton Browne, Belfast. Pathology.—Professor Symmers, Belfast. Pharmacology and Therapeutics.—Professor Ralph Stockman, Glasgow. Anatomy and Physiology.—Professor Sherrington, Liverpool. Dermatology and Electro-therapeutics.—Dr. Wm. Calwell, Belfast. Diseases of Children.—Mr. Harold Stiles, Edinburgh. Haematology and Vaccine Therapy.—Sir Almoth Wright, London. Hygiene and Public Health.—Dr. Louis Parkes, London. Laryngology, Otology, and Rhinology.—Dr. St. Clair Thompson, London. Psychological Medicine.—Dr. T. Outterson Wood, London. Surgery.—Professor Sinclair, Belfast. Tropical Medicine.—Dr. C. W. Daniels, London.

Special interest attaches to the section of Haematology, which is being inaugurated at this meeting, and as the President is recognised as a "first-rate fighting man," and the assailants of his theories are many and fierce, blood is likely to be shed. In many of the other sections the discussions promise to be interesting. The section of Dermatology will discuss "The Uses of Radium"; the joint sections of Public Health and Laryngology will discuss "Diphtheria Infection"; the Ophthalmic section will discuss "The Workmen's Compensation Act and Eye Injuries," and the Obstetrical Section, the report of the Ophthalmia Neonatorum Committee, lately published.

From the point of view of the man in the street, undoubtedly the most interesting discussion will be that to be held in the section of Medicine on Thursday, when Dr. Clement Dukes, of Rugby, will open a discussion on the medical aspects of athleticism, and many men of note in the medical world will take part. Among the visitors to the meeting are Professor Fuchs (Vienna), Professors Sonnenburg and Greef (Berlin), Drs. Depage, Delsaux, Jacobs, and Bordet (Brussels), Professor Fehling (Strassburg), Professor Sanfelice (Naples), Drs. Wickham (Paris), Calmette (Lille), Delavan (New York), Cullen (Baltimore), Gordon Byers (Montreal), and a number of Colonial delegates from all parts of the Empire.

#### MEETINGS ALREADY HELD.

The Representative Meeting, which comprises about 150 representatives of divisions of the Association, and which sits in private to deal with questions of medical politics, ethics, etc., began its sittings on Friday last, and continued them on Saturday and Monday. The question of advertising was discussed, and the following resolution was passed:—"That it is the professional duty of medical authors of articles in medical journals to co-operate with the proprietors and editors of those journals in preventing any improper use of

such articles for the purposes of advertisement." The medical inspection and treatment of school children was discussed, and one learned to realise some of the difficulties which would arise if the Act were adopted in Ireland, when it is so troublesome in England.

The Representative Meeting takes its work very seriously, and sat till 10 o'clock on Friday night, but adjourned at 5 o'clock on Saturday to allow the members to go out of town for the week-end. Two excursions had been arranged, one to Portrush and the other to Newcastle, Co. Down, and most of the members availed themselves of one or the other. Unfortunately, the weather was far from good, and unless it clears before the end of the week the outdoor entertainments will be sadly interfered with. There are not so many private garden parties as usual on the programme of entertainments, but the receptions at hospitals are much more numerous than usual. The Royal Victoria, the Mater Infirmorum, the Abbey Sanatorium, the Forster Green Sanatorium, are all giving afternoon receptions on Tuesday, Thursday or Friday afternoons, while Wednesday is reserved for the President and Lady Whitla, who are entertaining the whole Association and many of the public as well at a garden party at Lennoxvale, their beautiful home in the outskirts of the city.

## CORRESPONDENCE.

### FROM OUR SPECIAL CORRESPONDENTS ABROAD.

#### FRANCE.

Paris, July 23rd, 1909.

#### COMA OF DIABETES.

IN diabetes, there exist different varieties of coma, but the most important, and even the only important, is that attended with acetonuria.

As soon as a diabetic patient becomes somnolent, as soon as his breath smells of sweet apple, active treatment should be prescribed: drastic purgatives, large doses of bicarbonate of soda (one ounce daily).

Injections of a solution of bicarbonate of soda into a vein have been proposed by Stadelmann in confirmed coma, while M. Lepine employs this method with success in the premonitory period. No one, says he, would believe, without seeing it with his own eyes, the facility with which patients, in the above condition, support an intravenous injection of two quarts of a warm isotonic solution of bicarbonate of soda containing about five drachms to the quart. The two quarts were injected in three-quarters of an hour. The results were very satisfactory; the threatening symptoms disappeared, and during weeks and months the patients were free from acetonic accidents.

When the patient is in the coma, the chances of a successful issue are very slight; yet in some cases temporary improvement has been obtained by these injections.

Instead of injecting the liquid into a vein, some suggested injecting it into the cellular tissue, but this practice cannot be recommended as bicarbonate of soda employed in this way has been known to produce phlegmon or even gangrene.

In order to favour combustion of the toxic products, inhalations of oxygen have been prescribed in the premonitory period of coma. Such treatment may be useful, and in any case it can do no harm.

#### ASTHMA.

The treatment of asthma is always delicate and difficult. Dr. Monncorge, of the Mont-Dore, has recently published a *résumé* of his experience of twenty years in the treatment of this affection.

The patient should be placed in a sitting posture with the head high, all clothes loosened, the window opened in a well lighted room as obscurity increases the anguish of the dyspnoea.

The usual powders and cigarettes will be tried while pyridine which diminishes the cerebro-spinal reflectivity, and increases the secretions, will be allowed to evaporate in the room (a teaspoonful in a saucer placed on the floor in a corner of the room and renewed two or three times a day).

Dry cupping, mustard poultices, foot and hand baths, find their indications.

As to internal remedies, it is preferable to forego them if possible; if not, the treatment will vary according to whether it is a case of spasmodic seizure or of catarrhal asthma.

In the spasmodic phase, antipyrine as a moderator of the nervous system may be tried, or sulphate of quinine, fifteen to twenty grains a day. Hippo may also be useful as an emetic.

As to iodide of potassium, if the patient has never taken any, a large dose of 40 or 50 grains a day may frequently arrest the attack. If, on the contrary, the patient has been in the habit of taking iodides, a large dose may be tried for one or two days, and if no improvement is noticed, the iodide of potassium should be completely abandoned. In cardiac and renal complications it is counter indicated. Secondary treatment consists in opium for the cough, chloral for insomnia, bromide of potassium for the general nervous excitement, digitalis for renal insufficiency, etc.

In this same spasmodic form, where the asthma is no longer dry but humid, atropine may be given with advantage.

Once the spasm overcome and the catarrhal period set in, recourse should be had to emollient inhalations, balsams, terpine, etc. In some cases small doses of tartar emetic are useful:

Tartar emetic, 1 gr.

Water, 4 oz.

A teaspoonful twice a day at meals.

Dietetic régime is important: absolute milk diet for patients strong enough to support it; at the same time warm diuretic drinks. In weakly patients: eggs, milk, potages, a little bordeaux, but no square meal should be permitted even where the appetite might call for it; the stomach should not be loaded nor a long digestion imposed.

#### SNEEZING.

If sneezing is sometimes a salutary act, freeing the respiratory tract, it can become dangerous as a means of contamination, while in persons suffering from heart disease or those of plethoric disposition, spasmodic rhinitis may be attended with evil consequences. Several means have been recommended to arrest the spasmodic effort, some of them belonging to family records, but the easiest and perhaps the surest, according to Dr. Champeaux, is gentle massage of the frontal region with the palmar face of the fingers of each hand by passing them from the temples to the median line of the forehead and always in this sense; the little movement should be practised several times until the person is relieved. A stranger's hand is better than that of the patient (?).

In any case the method is easy and within the reach of all.

#### GERMANY.

Berlin, July 23rd, 1909.

At the Freie Vereinigung der Chirurgen, Hr. Neumann spoke on the DIFFERENT FORMS OF DISTURBANCE OF THE CIRCULATION OF THE MESENTERIC VESSELS, of which, after the manner of Sprengel and his followers, he distinguished four varieties—hæmorrhagic infarct and anæmic gangrene, anæmic infarct and hæmorrhagic gangrene—according to whether artery or vein is affected alone, or whether the chief trunk of the one or the collateral branches of the other are occluded. As illustrations, he showed a number of patients and preparations, amongst them an enormous thickening of the mucous membrane and muscular tissues, with a corresponding narrowing of the calibre of the bowel, from which, however, one got the impression that the way had been paved for a spontaneous recovery. He considered resection of the bowel implicated, as the operation of choice in such cases.

Hr. Braun had experimented on animals in regard to ileus, and had observed that an excessive secretion quickly took place in the part of the bowel above the constriction. Filling of the abdominal cavity with blood went hand in hand with this. The centre of blood pressure at first remained uninfluenced, until at

last terminal paralysis of it took place more or less suddenly. This was purely asphyxic or anæmic; it was not at all of a toxic nature. Large quantities of blood serum from such animals injected into other animals were absolutely harmless. The conclusion he drew from this was that treatment by opium was justifiable to a certain extent, as it had an influence on the over-filling of the abdominal cavity with blood. A good effect on the blood-pressure centre was observed from saline infusions and adrenalin, but it was not maintained.

Hr. Berkofsky had collected the cases of

#### GANGRENE OF THE BOWEL

that had been met with at the Friedrichshain Hospital during the past ten years. There were 61 cases of gangrenous hernia, and 20 cases from other causes. The operation of choice in the case of hernias had been primary resection; bringing the bowel forward and wrapping it in iodoform gauze had been quite given up, or was only used very exceptionally, and always with a fatal result. In gangrene the furrow of constriction also was always resected, never sutured over. For anastomosis of bowel Murphy's button was mostly used; the peritoneum was always sutured, but the remaining abdominal wound always left open. The mortality had been 32.6 per cent. Of the 20 cases of gangrene of the bowel without hernia, 15 had been operated on, of whom 10 died. The bowel contents above the gangrene were not removed. The results had been identical, whether local or general anæsthesia had been made use of.

Hr. Neumann showed an elderly woman with tumour-like infiltrations of the skin. Although the first impression was of sarcoma, the tumours really consisted of lymphocytes, especially of the eosinophile kind. The disease was distinctly getting worse, and so far had defied all treatment.

He then described a method of procedure that had done him good service in the treatment of perforated ulcer of the stomach. From the point of perforation he led a drain into the duodenum for purposes of nutrition; this was conducted outwards by a sleeve formed of omentum. In doing this the omentum was fixed over the point of perforation, and later, when the drain was removed, it served as a covering. The patient recovered, and remained free from trouble. He described further a case of ileus caused by constriction by the much-doubted mesenterio-mesocolic ligament, that ran from the base of the mesocolon of the sigmoid flexure to the attachment of the mesentery.

At the Medical Society, Hr. Halberstaedter discussed the

#### ÆTIOLOGY OF TRACHOMA.

As a member of the syphilis expedition to Java, he had ample opportunity of studying the disease. Examination of the secretions from the eyes of patients gave no results. He then rubbed the secretion on to the eyes of anthropoid apes; sometimes this was followed by redness and swelling, but not always. Implantation of a piece of excised follicle was never successful. In the scrapings from the cornea inoculated he always found characteristic cell inclusions, the various forms of which corresponded with varied stages of development. He found the same forms in human trachoma, but only in recent cases. In older cases, such as conjunctivæ that had been damaged by the trachoma, he had never found them.

#### AUSTRIA.

Vienna, July 23rd, 1909.

#### RELATIONS OF GLANDULAR SECRETIONS.

FALTA again brought this subject before the members of the Gesellschaft der Aerzte in the form of a criticism of Rudinger's experimental results, which he obtained from injections of infundibulin, etc.

In the case of starving animals it was found that adrenalin and thyreoidin acted principally on the transformation of albuminoid substances, while the infundibulin, or pituitin, increased the nitrogenous equilibrium without producing any poisonous phenomena. No increase of carbo-hydrate transformation could be observed. Adrenalin acted principally on the liver, not only in mobilising carbo-hydrates, but in forming them also. Thyreoidin



and infundibulin according to the experiments of Bolaffio and Todesko act powerfully on the transformation of lime and magnesia. Adrenalin on the other hand stimulates the changes of phosphorus potassium and sodium. On the pancreas and epithelial bodies there seems to exist opposite actions, as adrenalin influences the phosphorus bodies in the pancreas, while thyroïdin and infundibulin inhibit calcium changes. Priestly found that uric acid and the allantoids were increased by the use of adrenalin. Bertill found that injections of adrenalis produced a neutrophile leucocytosis with a disappearance of the eosinophile cells. Falta thought these glands might be divided into accelerators and retarders. In the former group he placed thyroïdin, adrenalin, and infundibulin, all acting on the heart and vessels, while the infundibulin and thyroïd greatly influence the metabolism.

Between the accelerators and retarders there is another group of substances that act on the chromofin system and pancreas which influence the metabolism of carbohydrates. The secretion of the thyroïdea and the epithelial bodies of the gland seem to be antagonistic; if the latter be extirpated and an electric current applied it will be found to be hyperæsthetic, but if the former be destroyed and the epithelial bodies left intact the opposite will be found to obtain. Early experiments proved a difference between thyroïdea and pancreas, as dogs from which the glands were removed could not be made glycosuric by the injection of adrenalin. The cachexia strumipriva is characterised by the dominating inhibition of the peripheral nerves as well as the vegetative nerve system. From this action another classification has arisen, sympathico-tropen, as adrenalis, and automo-tropen, including thyroïd and infundibulin; but to meet this nervine arrangement system hormone or general stimulator has been applied to adrenalin. It is evident from these complex actions that we are still using compounds, with a complex arrangement. The transformation of carbohydrates, according to experiments, is necessary to supply nourishment to the heart, nerve system, and muscles, as well as the breathing apparatus which is done through the medullary impulse on the sympathetic nerves, which are again regulated by the autonomy nerves.

Schwarz said he had experimented with a pressed extract of the pituitary body of horses, which he had injected into guinea pigs, weighing  $1\frac{1}{2}$  to 2 kilogrammes, and in all cases obtained polyuria—two hypophyses cerebri to each animal. This was accompanied with diarrhœa, but Borchardt's glycosuria was hardly ever present. He concluded that the pituitary body had no specific action on the animals, *i.e.*, any particular organ, and that the increased blood pressure of the suprarenal body was quite absent.

Schiff said he had experimented with the pituitary body for the last twelve years, and concluded that there is a striking analogy between the hypophysis cerebri and the thyroïd gland in the human being; both decidedly increase the elimination of phosphorous substances. This elimination is greatest from the bowel, as the urine is not much affected by them. It has also been proved beyond doubt that this phosphorus is in combination with lime, clearly proving that its source must be of an osseous nature.

#### MYCOSIS FUNGOIDES.

Riehl showed a patient, æt. 29, with erythrodermia desquamating, and in places there were accumulations the size of walnuts discharging from below the hard crust which in places formed tumours of a degenerative character. This secondary change was very unusual.

## FROM OUR SPECIAL CORRESPONDENTS AT HOME.

### SCOTLAND.

#### THE NEW PROFESSOR OF SYSTEMATIC SURGERY, UNIVERSITY OF EDINBURGH.

A MEETING of the Curators of Edinburgh University was held on the 21st, for the purpose of electing a successor to Professor Chiene. The Curators present

were the Lord Provost, Lord Stormonth Darling, Lord Dundas, Principal Sir William Turner, and Counsellors Brown, Dobie, and John Murray. After careful consideration of the qualification of the various candidates, the names of Messrs. Hodsdon and Alexis Thomson were selected, and after further deliberation, Mr. Thomson was unanimously elected. The Curators resolved to meet again on the 29th inst. for further consideration with reference to the vacancy in the Chair of Anatomy, caused by the death of Professor Cunningham.

Mr. Alexis Thomson is 43 years of age, and was educated at the High School of Edinburgh, the Realschule in Hanover, La Villette in the Canton de Vaud, the University of Edinburgh, and subsequently at the London Hospital. He became a Bachelor of Medicine at the age of 21, and was awarded a gold medal for his M.D. thesis four years later. He was appointed Assistant Surgeon to the Royal Infirmary at the age of 29, and has had long experience and success as a teacher, a high record as a scientific worker, and a wide reputation as an operative surgeon. For thirteen years he delivered qualifying lectures on surgery, and only discontinued systematic teaching in order to have more time for research. He has conducted classes in operative surgery for students for fifteen years, and for post-graduates for two years. As Assistant Surgeon he has had sixteen years' experience in clinical teaching and has been entrusted by the managers and University authorities with the duties of both Professor Annandale and Professor Chiene during their temporary absence from duty. When the Deaconess Hospital was founded in 1893 Mr. Thomson was appointed Surgeon, and has held that post ever since. He is an examiner in surgery for the Royal College of Physicians, and was for a number of years Inspector and extra examiner at the Apothecaries' Hall in Ireland. Mr. Thomson has an extensive acquaintance both with foreign literature and with foreign methods. He has worked at, or visited, the classes of Schede in Hamburg; Von Bergmann, Hahn, and Korte in Berlin; Durante and Alesandri in Rome; Terrier, Albarron, Kirmisson, Tuffier, Hartmann, and Walther in Paris; Lauz in Amsterdam; Schœemaker at the Hague, and has also visited Montreal, Toronto, New York, Baltimore, Boston, Chicago, and Rochester. He has represented the College of Surgeons at the International Medical Congress at Berlin, at the meeting of the American Medical association in Boston, and at the French Congress of Surgery in Paris. He is a member of the International Society of Surgery. Mr. Thomson has published a great deal of valuable scientific work, bearing especially on surgery and surgical pathology. His monographs on Tuberculosis of Bones and Joints, on Neuroma and Neurofibroma, are both well known and recognised as of permanent value. For the past six years he has acted as joint editor of the *Edinburgh Medical Journal*. It remains only to add that Mr. Thomson is one of the most popular members of the medical profession in the city, and that his election has received almost universal approbation. A host of well-wishers congratulate him on his well deserved success, and confidently anticipate that his election will strengthen the University and the Medical Faculty.

### EDINBURGH UNIVERSITY GRADUATION CEREMONIAL.

THE annual graduation ceremony took place on Friday, July 24th. Only two LL.D.'s were conferred, the recipients being the Right Hon. George Wyndham, M.P., D.C.L., the Lord Rector of the University, and Madame Curie, Paris. Great disappointment was felt that, on account of illness, Mme. Curie was compelled to receive the degree *in absentia*. After the ordinary degrees had been conferred and the prizes distributed, Sir Thomas Fraser delivered the customary address to the graduates. He said this was the third occasion on which the duty had fallen to his lot, and that the gratification he felt at having so long a period of office vouchsafed to him was tempered by the loss of so many old friends and colleagues—in the Senatus there was only one and in the Medical Faculty no member remaining of those who held office when he became a Professor. He made reference to the various



changes which had occurred during the year—to the death of Professor Cunningham, the resignations of Professors Chiene and Kirkpatrick, and then passed on to speak of the leading features of University life since he last addressed the graduates in 1894. He was gratified to find a remarkable advance had taken place in the output of research work, for which he had appealed in his speech in 1894. Former apathy had given place to an active policy of encouragement of original work, and this had resulted in a very high standard characterising many of the M.D. theses during recent years. Since 1894 £31,719 had been presented to the University in aid of research, irrespective of the grants of the Carnegie Trustees or from the McKie Endowment Fund. The important result was that higher education by research was now so firmly established in the University that it was no longer necessary to advocate its claims. As a further direction in which the University might develop, and thereby increase her usefulness, he suggested specialisation. The advance of knowledge in many lines, and in the comparatively restricted subject of medicine, had been so great as to exceed the capacity of any individual, and the time was now ripe for extending that recognition to other separate subjects, which had already been granted to medicine, surgery, midwifery, and gynaecology. He suggested that diplomas in special branches of medicine might be instituted—for instance, in mental diseases, in nervous diseases, in ophthalmology, in diseases of the ear and throat. The courses of instruction would generally extend over nine months. In the meantime the University had instituted a diploma for specialised study in the subject of tropical diseases only; there was equal need for a similar diploma in Public Health (additional to the existing degree in Science and Public Health).

The graduation ceremonial was concluded by the benediction being pronounced, and thereafter the graduates filed on to the platform and shook hands with the Senatus. The usual luncheon in the University Union followed, presided over by Mr. J. J. M. Shaw, M.A., M.B., President of the Union.

## LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

### THE ASSOCIATION OF MEDICAL DIPLOMATES OF SCOTLAND AND THE MEMBERSHIP QUALIFICATION.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—Those who hold the licentiatehip of the Royal College of Surgeons of Edinburgh, either alone or conjoined with the Glasgow or other Scotch qualifications, have for a long time laboured under a disadvantage in practice owing to the lack of a membership qualification. The matter has for several years engaged the earnest attention of the Association of Medical Diplomates of Scotland, on whose behalf I venture to ask the insertion in your valuable columns of the following communication addressed to the Edinburgh College.

I am, Sir, yours truly,  
DAVID WALSH, M.D.,  
President A.M.D.S.

Welbeck Street, London, W.,

July 21st, 1909.

To the President and Council of the Royal College of Surgeons of Edinburgh.

Gentlemen,—The Association of Medical Diplomates of Scotland beg respectfully to remind you of a petition formally presented to your President and Council in 1905, praying that steps be taken, by extension of Charter, if necessary, to secure an additional diploma of membership for your ancient College. It was shown in that petition that the lack of an intermediate qualification between the licentiatehip and the fellowship imposes a serious social and professional handicap upon your licentiates in various parts of the United Kingdom and elsewhere, inasmuch as the majority of their competitors hold the membership of other Colleges. The Council of the Association of Medical Diplomates of Scotland, therefore, as

representing the interests of Edinburgh Diplomates in all parts of the world, would be glad to learn whether the Council of the Royal College of Surgeons of Edinburgh have taken any further steps in the matter. If nothing has yet been done they would venture to ask if there be any likelihood of this most important, and, in their opinion, most salutary change being considered seriously by the Council of the College.

It need hardly be said that the Council of the Association would most willingly co-operate with the College in any way that might lead to the desired end. They presume the College will hardly require any further proof of the popularity of the proposed change than that afforded by the petition already formally lodged with the College—a document that was signed by many hundred of fellows and licentiates.

In conclusion, we venture to urge that the institution of the diploma of membership must infallibly lead to a great increase of the popularity and the usefulness of our ancient College: nor could it fail to establish a fresh bond of union between the College and its diplomates in all parts of the world, at the same time re-awakening old memories, interests and associations: while it would add to the material prosperity of the College for many years to come.

Awaiting the honour of your further reply to the considerations set forth in our former petition,

We have the honour to remain, on behalf of the Association of Medical Diplomates of Scotland,

Yours faithfully,

(Signed),

DAVID WALSH, M.D., President.

SKENE KEITH, M.D., Hon. Treasurer.

P. H. PARSONS, L.R.C.S. and P.Ed., etc.,  
Hon. Secretary.

### THE ANTI-VIVISECTION CONGRESS AND ARCHDEACON WILBERFORCE.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—When a man in the position of the Venerable Archdeacon Wilberforce makes a statement about the moral conduct of any person or group of persons, it naturally receives the implicit belief from the general public which is due to the reputation of its utterer. No matter what the modesty of the Archdeacon, and no matter how humbly he may view the important position which he has attained and his own merits, he cannot be ignorant of this fact. Knowing therefore his advantages as a maker of statements, he must from a sense of moral responsibility weigh his words, and it is inconceivable to think that he would publicly state not alone what he knows to be inaccurate, but—which is a very different thing—what he does not know to be accurate. It is, therefore, elemental that when he states that no greater cruelties are perpetrated in the world than those done in *some* physiological laboratories (the italics are mine), he must know the laboratories to which he refers. Further, he admits that there are *some* English laboratories which are exceptions (again the italics are mine), and therefore until he, so to speak, separates the sheep from the goats, he is lending himself to an attempt to throw a stigma on all. Surely the Archdeacon does not think that this is right, and that it is honourable to use his great position to make the innocent suffer with the guilty. It is inconceivable, and if he will accept an anonymous hand to help him from an anomalous position I venture to invite him to answer the following questions in your columns lest his inexplicitness should cause the weaker brother to offend to a greater degree, and to consider that his cause is entitled to the support of inaccuracy.

My questions are as follows:—

(1) Are any of the physiological laboratories, in which the "greater cruelty" is perpetrated, situated in the British Isles? If not where are they situated?

(2) In either event, what are the grounds on which he considers he is justified in using the adjective "greater" as applied to cruelty?

(3) Can he of his own personal knowledge apply the term cruelty to the operations performed in any laboratory?

(4) If he can, and if such laboratory is situated in

his own country, does he not consider it his duty to denounce it by name, regardless of the consequences to himself?

The Archdeacon has placed himself in a position which he cannot occupy with honour until he has proved his statements, and from which he cannot retreat except after confession of his error as public as was his sermon. His statements, if true, call for his further action. If they are untrue they serve only to bring discredit on the teachings of his church whose doctrines inculcate charity, the care of the sick, and the spread of truth because it is truth.

I am, dear Sir, yours truly,  
DOCTOR OF MEDICINE.

#### NORMYL TREATMENT.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—If one of the 150 doctors who, according to Mr. Cecil Chapman, "are customers" of the Normyl Treatment Association, will perform the duty incumbent upon him, and will bring before one of the medical societies a description of the cases he believes to have been successfully dealt with by the treatment, there cannot be the least doubt it will be proved that there exists no scientific basis for confidence in the efficacy of the remedies. If any one of the 150 had anything like scientific proof, he would need no urging to take this course. It may be possible to produce a number of cases that have left off drinking after the Normyl treatment, but, before accepting the results as due to the cause assigned to them, a good many facts will need establishing. We shall first need a critical diagnosis of the nature of each case. Many persons taking alcohol to excess give it up when the mental or physical pain from which they have been suffering is assuaged, perhaps by suitable moral influence or by medical treatment. These are very different from the cases of moral obliquity of infinite variety discoverable among drunkards and dipsomaniacs, and from the cases in which the nervous system, brain, and spinal cord have suffered alcoholic degeneration. Mr. Chapman says that one ingredient in the Normyl medicines defies the attempts of analytical chemistry to identify it. It can, at any rate, be separated, and its powers of causing physiological reaction of any kind be determined. If it could neutralise the mental and physical causation of even a small class of cases, there would not be the least difficulty in raising much more than £20,000 for its purchase; if it could cure drunkenness arising from half-a-dozen of the many more distinct causes it would be miraculous. The whole thing is a delusion, and if it is not complimentary to Mr. Cecil Chapman and his medical and philanthropic colleagues to repeat this, I am sorry. Let them take steps to submit the remedy to a scientific tribunal, so that, if established, suffering humanity throughout the world may participate. In every civilised country there exist scores of scientific workers who will eagerly examine any new treatment of disease offering the least claim to their consideration. If they all ignore the Normyl treatment, it is no doubt for the sufficient reasons which men of science, but not philanthropic amateurs, are easily able to recognise.

I am, Sir, yours truly,  
MEDICAL TEMPERANCE REFORMER.

July 23rd, 1909.

#### THE FERMENT TREATMENT OF DISEASE.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—In the leading article on the above in your issue of July 21st it is stated that I am carrying out investigations in the laboratories of King's College Hospital. It is at King's College, not the hospital, at which my investigations are being pursued.

My period for work having terminated at the Imperial Cancer Research Laboratory, and being anxious to continue work in the direction of investigation of the blood in cancer, to which side of the question in relation to the treatment of cancer by trypsin and to the tryptic or anti-tryptic index under different conditions I drew attention in a paper of mine, published in the MEDICAL PRESS AND CIRCULAR of July 17th, 1907, Professor Halliburton very kindly afforded me facilities for work in the Physiological Laboratory of King's College, London.

Lest there be any misconception on the point, perhaps you will allow me to say that your article, above referred to, was written entirely unknown to me, though I feel bound to confess that it would have been strange indeed if no one had replied to criticism in the lay press, obviously on my work.

I am, dear Sir, yours truly,  
J. A. SHAW-MACKENZIE.  
Green Street, Park Lane, W.,  
July 23rd, 1909.

### MILITARY & NAVAL MEDICAL NOTES.

**GENERAL HOSPITALS IN CASE OF WAR.**—The arrangements for establishing general hospitals throughout the country in case of war are now as complete as can be expected, and the Mobilisation Section of the War Office possesses a record of every town hall, church, or large building throughout the country suitable for conversion into a general hospital of 520 beds (20 for officers). The Red Cross has given every help in the compilation of information necessary for the efficient mobilisation of the Territorial Hospital personnel and materiel, and the list of medical officers available on mobilisation fills seven closely-printed pages of the Army List. The Advisory Council of the Territorial Nursing Service has also assisted in the preparation of a large list of nurses available on mobilisation.

**THE OFFICE OF DIRECTOR-GENERAL ARMY MEDICAL SERVICE.**—An important leading article appeared in last week's issue of the *Army and Navy Gazette* on "The Future Director-General Army Medical Service." It discusses the question of extensions of service being granted to officers in high rank, and the disadvantages arising therefrom. In this case it has become well known that an extension is about to be granted to Surgeon-General W. L. Gubbins, whose retirement was due on the 26th inst., with a view to his succeeding the present Director-General when he gives up office at the end of the year. In future it is proposed to make it a rule that every officer appointed Deputy Director-General at Headquarters shall, in course, succeed the Director-General when the vacancy shall occur.

**THE OFFICE OF ARMY MEDICAL INSPECTOR.**—The Inspector of Army Hospitals, when the appointment was first made, was placed under the Inspector-General of the Forces. This now ceases, and the Medical Inspector is part of the War Office staff.

**THE RETIREMENT OF ARMY MEDICAL OFFICERS.**—It is very unfair that such difficulties are placed in the way of retired Army medical officers re-employed obtaining privilege leave. Every man working year in and year out needs relaxation for a month or so. As a rule, very little sympathy is shown by administrative medical officers to retired-pay executive officers. It is unjust that a retired military medical officer should have to provide a *locum tenens*.

**BLACKWATER FEVER.**—It is stated in an Indian paper that the main conclusions of Dr. Bentley and Captain Christophers, Indian Medical Service, as a result of their investigations in connection with blackwater fever in the Dooars, is that this malady is due to continuous attacks of malaria, and is not a separate disease. The remedy for it is to diminish malaria amongst both Indians and Europeans by quinine prophylaxis under expert advice. Captain Christophers is now investigating malaria in the Punjab, and Dr. Bentley is conducting a similar special inquiry at Bombay.

**ROYAL ARMY MEDICAL CORPS.**—The following promotions and appointments were officially Gazetted on Friday last:—1st Highland Field Ambulance.—J. D. Fiddes, M.B., to be Lieut., June 10th. 2nd North Midland Field Ambulance.—R. M. West, M.D. (late

Captain, 5th Northern General Hospital, Royal Army Medical Corps), to be Lieut., June 9th. 1st Wessex Field Ambulance.—Lieut. A. W. F. Sayres, to be Captain, June 13th. 5th Northern General Hospital.—Capt. R. M. West, M.D., resigns his commission, June 9th. 3rd Southern General Hospital.—Officers whose services are available for mobilisation:—A. L. Ormerod, M.D., to be Captain, July 10th. Attached to Units other than Medical Units.—Capt. C. K. Bowes, M.D., resigns his commission, June 15th. For attachment to Units other than Medical Units.—L. D. Bailey, to be Lieut., June 19th.

## REVIEWS OF BOOKS.

### HANDBOOK FOR ATTENDANTS ON THE INSANE. (a)

THIS trusty guide needs no recommendation from us, for its reputation has, in the past quarter of a century, been solidly established. It is but a truism to say that no one who undertakes the charge of an insane patient, whether in an asylum or elsewhere, should be without it, and the sphere of its usefulness is by no means confined to asylum attendants. The present edition differs from the former ones especially in containing a good deal of advanced knowledge, particularly concerning the structure and physiology of the nervous system. It might be doubted whether much of this knowledge is not irrelevant for the present purpose, or even misleading, on account of the false perspective thus given. For instance, it is hard to see the relation between the subject of the different layers of nerve cells in the cortex, or of the intimate structure of Pacinian corpuscles to the practical care of the insane. Still, any knowledge is better than none, and, pending the arrival of the happy day when the subject of pathological psychology reaches England from the countries which have done so much valuable work in this domain, perhaps anatomy is *faute de mieux* as good a subject as any other to teach asylum attendants.

### MENTAL DEFICIENCY. (a)

WE welcome the appearance of this book for many reasons. Mr. Tredgold's researches on the subject are well-known and highly appreciated. The subject is one of great importance, and too much neglected. Finally, the author has given his knowledge in a readable form, and it may at once be said that the book constitutes, perhaps, the best text-book on the subject in the English language. All aspects are considered, the clinical, pathological, and sociological. It is not the place to deal here with questions of detail, but we desire to call attention to a defect of the book which we trust will be remedied in a future edition—namely, the absence of reference to German research, which has throughout been practically ignored. When by far the most accurate work emanates from Germany, this is a grave fault in a book that aims at being broadly inclusive and is otherwise of a most practical and instructive character.

### ON SYMPTOMS AND THEIR INTERPRETATION. (a)

IN these days of laboratory research purely clinical methods are apt to be overlooked, or, at all events, relegated to a back seat, so to speak. It is, therefore, with great pleasure that we welcome Dr. Mackenzie's efforts to revive the old bedside observation method of diagnosis, feeling sure that if this were more assiduously practised at the present time, much good would result. The views put forward by the author are the result of an inquiry extending over a period

of more than twenty years. He starts with the assertion that medicine has not attained that position in science which ought justly to belong to her, and at the same time he insists on accuracy of observation. "An inquirer should keep his mind ready to review his most cherished beliefs," is a piece of very good advice which many workers would do well to follow.

After attempting to classify the symptoms of disease, the writer goes on to consider the great symptom of pain in all its varied aspects, and especially what he calls visceral pain. The importance of increased sensibility of the external body wall in relation to diagnosis is carefully discussed. The various organic reflexes come in for very full consideration, while a chapter is devoted to the laws determining the nature of the reflex symptoms. The rest of the book is of a more practical nature, and is certainly of a most highly interesting and original character. After telling us how to make a preliminary examination of the patient, Dr. Mackenzie takes up the various systems and organs from a symptomatic point of view. Here he is at his best. Nothing could be more instructive than, say, his remarks on the locality of pain in gastric ulcer, on gastric symptoms in cholelithiasis, or on the bearing of symptoms on prognosis. The book is evidently the result of much painstaking and repeated observation; it is eminently practical, and will be found stimulating to read and easy to assimilate. It reflects the spirit of a medical age which is practically decadent, but in which, nevertheless, much valuable work was done.

### NEURASTHENIA AND NEUROSES. (a)

THIS little volume constitutes a sequel to the author's interesting "L'Education Rationnelle de la Volonté" that was published a short while ago. It has one great merit—namely, that it vigorously denounces the great Weir-Mitchell dogma that still lies so heavy on the land. It is, therefore, a book that especially needs to be read in Anglo-Saxon countries. To anyone who has made a scientific study of the psycho-neuroses it is a convincing proof of the ignorance of our profession on the subject that this dogma should so long have been accepted. Levy, in a masterly way, points out how irrational is the conception that, once the diagnosis of hysteria or neurasthenia is made, all that remains to be done is automatically to put the patient to bed, to isolate and over-feed him, and all will be well. In no group of conditions does individual treatment vary more from patient to patient. Levy rightly holds that a large number of such cases are better treated when still at work, or, at all events, engaged in some useful occupation.

Further than this the book has no value, for, as the author appears to be unaware of the recent epoch-making work of the German school on the psychogenesis and nature of these conditions, his view of the treatment of them remains entirely superficial.

### GRAPHIC METHODS IN HEART DISEASE. (a)

THE value of graphic methods in the investigation of heart affections, especially if other physical observations are made at the same time, cannot be overestimated. Hitherto, the sphygmograph has alone received the careful attention of writers on heart disease, or, at all events, other graphic methods have been only incidentally referred to. There is, therefore, abundant scope for anyone who, like the author, cares to write a book covering the entire ground of such methods of investigation. After certain preliminary remarks, the author supplies his readers with a very good account of the various instruments required, and their methods of application. He then goes on to consider normal records as obtained by the use of the instruments described. Sphygmograms, cardiograms, and venous pulse tracings are admirably discussed and very fully illustrated. Then comes a chapter on the auricular type of venous pulse and its clinical importance. The extra-systole, which is the

(a) "Handbook for Attendants on the Insane." Fifth Edition. Published by the authority of the Medico-Psychological Association. London: Baillière, Tindall and Cox. 1909. Price 10s. 6d. net.

(b) "Mental Deficiency (Amentia)." By Dr. A. F. Tredgold, Consulting Physician to the National Association for the Feeble-minded, Research Scholar in Insanity. Pp. 410, with 67 illustrations. London: Baillière, Tindall and Cox. 1909. Price 10s. 6d. net.

(c) "Symptoms and their Interpretation." By James Mackenzie, M.D., F.R.C.P., Physician to the West End Hospital for Nervous Diseases, London, etc. London: Shaw and Son. 1908.

(a) "Neurasthenie et Névroses, leur guérison définitive en cure libre." Par Paul-Emile Levy. Pp. 407. Paris: Alcan. Prix 4 francs.

(b) "Graphic Methods in Heart Disease." By John Hay, M.D., M.R.C.P., Assistant Physician, Liverpool Royal Infirmary. With an introduction by James Mackenzie, M.D., M.R.C.P. London: Henry Frowde, Hodder and Stoughton. 1909.

most common cause of cardiac arrhythmia, has a chapter devoted to its consideration. The ventricular or nodal form of venous pulse is next described in an exceptionally full and clear way. The rest of the volume is devoted to the disturbances of function to which the heart is liable, and to certain difficulties in the interpretation of sphygmograms.

This is a model of what such a book should be—not too technical, but yet scientific; free from padding, and yet sufficient for the needs of the practitioner who wishes to study the subject for himself. The series of tracings figured by the author is very representative and wonderfully complete, and for these alone the book is worth possessing, apart altogether from the text. They have been well reproduced, and will be found most reliable and useful for purposes of reference. We congratulate Dr. Hay on the publication of such an excellent manual, which we trust will do much to stimulate further research along the lines indicated so clearly by the author.

#### THE SANITARY OFFICER'S HANDBOOK OF PRACTICAL HYGIENE. (a)

THE military branches of the profession are, according to the Preface of this book, not nearly so well off as the civilian with regard to the instructions for carrying out the necessary practical work. The authors appeal to those who have had previous training, but whose memories require refreshing with regard to details. The practical work entailed in the Chemical and Bacteriological Examination of water, sewage, ventilation, foods and beverages are given. The processes have been carefully selected and the methods for working out results carefully explained. The pages are interleaved and the print is excellent. We notice one or two trivial mistakes: On page 51 there is a misprint of "4" for "24" and the omission to specify the presence of an oxidising agent in the sulphuric acid used in testing for formaldehyde might lead to the use of the pure acid and consequent failure to find the preservative. The section on "Preserved Foods" calls for especial commendation, as also, considering its size, does the chapter on Bacteriology. The authors do not claim too much for their work, and their wishes with regard to its acceptability are certain of fulfilment.

## MEDICAL NEWS IN BRIEF.

#### The Sixteenth International Congress of Medicine.

A MEETING of the National Committee for Great Britain and Ireland was held at the Medical Society of London on July 22nd, 1909, Dr. F. W. Pavy, F.R.S., President, in the chair.

It was proposed by Sir William Sinclair, seconded by Mr. Eliot Creasy, that the members of the National Committee be circularised as to the advisability of asking H.M.'s Government to invite the 17th International Congress of Medicine to meet in this country. A report was made upon the appointment of official delegates at the Budapest Congress. It was also pointed out that members of the Congress who desire to travel with the Royal Society of Medicine party should communicate at once with Mr. J. V. W. MacAlister, at 20, Hanover Square, London, W. The meeting closed with a vote of thanks to the Medical Society of London for the use of their rooms.

#### Death Under an Anæsthetic.

AT the Royal Infirmary, Sheffield, on July 21st, an inquest was held on the body of a girl of 7 years, who had succumbed to the effects of an anæsthetic. The girl suffered from earache, and it was thought a slight operation would afford relief. The child never thoroughly recovered consciousness. Artificial respiration was resorted to for over half-an-hour, and strychnine injections were tried, but without avail. It

(a) "The Sanitary Officer's Handbook of Practical Hygiene." By C. F. Wanhill, Major, R.A., M.C., M.R.C.S.Eng., L.R.C.P. Lond., D.P.H., Assistant Professor of Hygiene, Royal Army Medical College; and W. W. O. Beveridge, D.S.O., Major, R.A.M.C., M.B., C.M. Edin., D.P.H. Cantab., Analyst to the Army Medical Advisory Board. Pp. 151 and viii. London: Edward Arnold. 1909.

was stated that there were 17 other operations of the same character the same day, and 400 last year without misadventure. There had not been a death in the Infirmary under such circumstances for over four years.

The jury found that the deceased died from the effect of an anæsthetic.

#### Society for the Relief of Widows and Orphans of Medical Men.

AT a Quarterly Court of the Directors of this Society, held last week, Dr. Blandford, President, in the chair, the death of a member of the Society was reported, and seven new members elected. The sum of £1,255 was voted for paying the half-yearly grants to the forty-eight widows and thirteen orphans on the books of the Society.

The widow of one of the members applied for relief; her husband, owing to ill-health, had been unable to make any provision for his widow. A grant at the rate of £50 per annum was voted.

The Society only grants relief to the widows and orphans of deceased members. Membership is open to any registered medical practitioner who at the time of his election is resident within a twenty-mile radius of Charing Cross. The subscription is two guineas a year, or a member may become a life member by paying a sum fixed by the by-laws of the Society.

The invested funds now amount to over £100,000.

Application forms for membership and full particulars may be obtained by applying to the Secretary at the offices of the Society, 11, Chandos Street, Cavendish Square, London.

The next election takes place on October 13th. Application forms must reach the Secretary on or before September 22nd.

#### Short Hair for Girls.

A GOOD deal of excitement is said to be existing in Willesden over a circular issued to parents by the Medical Officer to the Willesden Education Committee, in which he urges them to send their girls back to school after the summer vacation with their hair cut short. He says:—

"Many parents desirous of keeping their children's heads clean find it almost impossible to do so in the case of girls on account of the fact that they wear long hair.

"There is absolutely no need for girls to wear their hair long, and if the cleanly parents will set the example of having their girls' hair cut short whilst at school, much more hygienic conditions will be established in our public schools. On the eve of the holidays I venture to make this appeal to parents to send all children to school with short hair.

"There should be no objection to doing this, and there can be no doubt that long hair in schoolgirls will come to be recognised as a badge of uncleanness. The sensible people who recognise the claims of hygiene must first set the example to those parents who are insensible of the shame which should be felt at the evidence of parental neglect presented in the dirty state of a child's head."

There is a revolt amongst the mothers, who have determined not to comply with the circular. One indignant parent, on receipt of the letter, at once waited upon the head teacher with a Bible, and pointed out that the advice of the medical officer was against Biblical teaching.

#### Hospitals' Tuberculosis Committee.

A SPECIAL meeting of the Committee was held at 76, Grafton Street, on Friday afternoon. Present:—Her Excellency the Countess of Aberdeen, Sir John Moore (in the chair), Dr. M. F. Cox, Dr. Alfred R. Parsons, and Sir William J. Thompson (Hon. Secretary).

The minutes of the previous meeting were read, confirmed and signed. Her Excellency stated that on her recent trip to Canada and the United States she had had the opportunity of meeting a number of workers in the anti-tuberculosis campaign which is being carried on so actively in America. Her Excellency was invited to address several meetings in New York, Boston, and Detroit, with the special object of describing how the crusade is being conducted in Ireland under the

auspices of the Women's National Health Association. Great interest was manifested in the movement, and the result has been the formation of committees in the cities above-mentioned for the purpose of arousing sympathy amongst American citizens of Irish parentage, and of obtaining their practical co-operation in assisting the work in Ireland.

One gentleman, Mr. Robert Collier, has already promised Lady Aberdeen £1,000 per annum for five years, with the object of equipping and starting a tuberculosis dispensary in the city of Dublin in memory of his late father, Mr. P. J. Collier, and to be called after him.

The Committee expressed their pleasure at this announcement, and their gratification at the practical results of the meetings addressed by Lady Aberdeen on behalf of the Health Movement in this country. It was agreed by the Committee that the Dublin hospitals be communicated with, with the object of obtaining their co-operation in the work of the proposed tuberculosis dispensary.

#### Bombay Medical Congress Exhibition, 1909.

It is officially notified that the exhibit of Messrs. Burroughs, Wellcome and Co., at the Bombay Medical Congress, held in February last, has received the highest award.

### PASS LISTS

#### University of Durham.

THE following candidates have passed the First Examination for the Degree of Bachelor of Medicine:—1.—Elementary Anatomy and Biology, Chemistry and Physics.—Eric Johnson, L. Everitt Markham, Roger P. Ninnis, John L. Pringle, Frank B. Robson, James S. Soutter, Gordon S. Woodman.

2.—Chemistry and Physics.—George A. Berkeley-Cole, Garfield Carse, Idris D. Evans, Robert L. Kitching, Reginald A. Hooper, Nora Murphy, Frederick J. Natrass, Carinna A. O'Neill, Grace W. Pailthorpe, Evelyn Ritson, Arthur Sutcliffe, Cedric O. Shackleton, Cyril Duncan.

3.—Elementary Anatomy and Biology.—Walter Lessey, Ivan M. Pirrie, Felix S. Rood, M.R.C.S., L.R.C.P.

4.—Elementary Anatomy.—George E. Stephenson. The following have passed the Second Examination for the Degree of Bachelor of Medicine:—

Anatomy, Physiology, and Materia Medica.—Ronald G. Badenoch, Edgar Babst, Joseph J. Brown, Theonie R. Burrell, Joseph W. Craven, Evelyn A. Constable, Sarah L. Green, Norman Hodgson, James Kerr, Francis J. Lidderdale, John G. Ogle, Charles O'Hagan, Lionel G. Pearson, Fred Phillips, B.A., Thomas C. Storey, Eleanor Walkinshaw, Samuel K. Young.

The following have passed the Third Examination for the Degree of Bachelor of Medicine:—

Pathology, Medical Jurisprudence, Public Health, and Elementary Bacteriology.—John Hamilton Barclay (Honours—First Class); Michael Brennan (Honours—Second Class).

Pass List.—Oscar F. D. Airth, John B. Alderson, William H. I. Bathurst, Thomas A. Hindmarsh, William Hudson, Harold L. James, Frank H. Kennedy, John Lumb, John H. Owen, Thomas A. Peel, Eliot Jessie Ramsbotham, Madeline R. Shearburn, Carl J. V. Swahnberg, Charles S. Thompson, Olivia N. Walker, Arthur H. Wear.

#### University of Liverpool.

At the Graduation Ceremony, on July 10th, the following degrees were conferred:—

Ch.M. (*ex-officio*).—W. Thelwall Thomas and Robert Jones.

M.D. Degree.—J. A. Murray Bligh, H. E. Heapy, H. R. Hurter, L. Hutchinson, A. Hendry, T. W. Jones, J. McClellan, J. E. W. MacFall, J. Graham Martin.

M.B., Ch.B.—W. A. Daley (first class honours), K. J. C. Bradshaw (second class honours), A. G. W. Owen (second class honours), N. W. Steinberg (second class honours), J. W. Cropper.

First M.B., Ch.B. Examination.—Parts I. and II.—C. W. Dixon, J. R. Jones, E. B. Marsh, A. C. Mooney, H. S. Pemberton, R. E. Roberts, J. St. G. Wilson.

Part II.—F. A. Belam, A. D. Bigland, H. E. Marsden, R. Martlew, Beatrix M. Walker.

Second M.B., Ch.B. Examination.—Part "A."—D. H. Clarke, R. C. Crooke, J. E. Getting, R. Heald, N. P. Laing, J. Loudon, G. W. Mooney.

Part "B."—R. W. Gemmell and M. T. Morgan.

Final M.B., Ch.B. Examination.—Part I.—J. Bamforth, J. E. Barnes, J. Campbell, A. A. Dear, E. S. Miller, W. R. Wade, T. W. Wadsworth.

Part II.—K. J. C. Bradshaw, J. W. Cropper, W. A. Daley, A. G. W. Owen, N. W. Steinberg.

Final B.D.S. Examination.—F. Halsall.

First L.D.S. Examination.—P. G. Capon, C. Q. Dinn, S. S. Tiffin, W. Williams.

Second L.D.S. Examination.—J. Burns, W. B. G. Jones, J. Tyson.

Final L.D.S. Examination.—G. P. P. Clapham.

#### University of Aberdeen.

At the Graduation Ceremony on July 21st, 1909, the following degrees were conferred:—

Degree of Doctor of Medicine (M.D.).—Williamina Abel, M.B., Ch.B.; Thomas Craig Boyd, M.A., M.B., Ch.B.; Eneas K. Mackenzie, M.B., Ch.B.; Charles J. R. Milne, M.B., C.M., Major, Indian Medical Service.

Degree of Bachelor of Medicine (M.B.) and Bachelor of Surgery (Ch.B.).—George Spencer Melvin (with Second-class Honours), William R. Allan, William J. Calder, M.A., Robert W. Chalmers, William Chapman, Douglas Craig, Robert G. Davidson, Henry Duguid, Robert W. Eddie, Alexander M. Geddes, William I. Gerrard, Elizabeth McHardy, George Macpherson, James Rae, M.A., George E. Shand, William L. Stephen, Francis W. Stuart, John E. Thompson, Robert Tindall.

The John Murray Medal and Scholarship (awarded to the most distinguished Graduate (M.B.) of 1909) was gained by George Spencer Melvin, Montrose.

Diploma in Public Health.—James Laing, M.A., M.B., Ch.B. Aberd.; James A. Milne, M.B., Ch.B. Aberd.; John A. Watt, M.B., Ch.B. Aberd.

#### Royal Colleges and Faculty of Physicians and Surgeons, Edinburgh.

THE July examinations of the Royal College of Physicians of Edinburgh, Royal College of Surgeons of Edinburgh, and Faculty of Physicians and Surgeons of Glasgow, held in Glasgow, have concluded with the following results:—Passed the first professional examination:—Roland J. Croxford, George A. Grandsoult, Joseph V. Duffy, William C. Holburn, William Bannatyne, Alexander Watson, Robert C. Craig, James Williamson.

The following passed the third professional examination:—Haripado Chatterjee, India; William Wood, Morris W. Rees, Leon Galdemar, India; John B. Michie, James M'Cusker, John M. Chrystie, Robert H. Jones, Maurice J. Anderson, William E. Hopkins, Robert Anderson.

The following passed the final examination and were admitted L.R.C.P.E., L.R.C.S.E., L.F.P.S.G.:—Thomas S. Douglas, William E. Hopkins, William J. Taugher, Canada; Angus C. Livingston, James Young, Ernest W. Wilbourne, Patrick J. Taaffe, William Browne, Seringapatam N. S. Aiyengar, Mysore; George M. MacLeod, Erachshaw Dinshaw Shroff, Bombay; Shivanarain Rozdon, Simla.

#### Society of Apothecaries of London.

THE following candidates, having passed the necessary examinations, have been granted the L.S.A. Diploma of the Society, entitling them to practise Medicine, Surgery, and Midwifery:—H. A. Hancock, W. J. Morton, and H. M. Pollard.

#### Conjoint Examinations in Ireland.

THE following candidates have passed the Third Professional Examination of the Royal College of Physicians and the Royal College of Surgeons, July, 1909:—J. T. Duncan (with Honours), A. E. Bedell, C. J. Bourke, C. P. Corbett, J. Devine, I. A. Dowling, H. C. Gilmore, R. H. Hodges, C. J. Kelly, A. M. Lanphier, H. R. L'Estrange, H. M. E. H. McAdoo, P. McGrath, Miss A. H. Mullen, J. O'Kelly, W. A. Swan.

## SUMMARY OF RECENT MEDICAL LITERATURE, ENGLISH AND FOREIGN.

*Specially compiled for THE MEDICAL PRESS AND CIRCULAR.*

**The Operative Treatment of Rupture of the Uterus, with an Account of Three Cases Treated by Abdominal Hysterectomy.**—Eden (*Journ. Obst. and Gyn. Brit. Emp.*, XV., 6).—The risks in rupture of the uterus are shock, hæmorrhage, and sepsis. The amount of shock produced by an extensive laceration, whether complete or incomplete, is always severe, and when associated with free bleeding it becomes profound. The arterial spasm and depression of circulation produced by shock are probably of service in temporarily arresting bleeding. An improvement in the general condition due to subsidence of shock may then give place to relapse from recurrent bleeding, and this improvement, followed by deterioration, is an important indication of the recurrence of internal bleeding. Hæmorrhage and sepsis are much more formidable risks than shock. The frequency with which serious bleeding occurs in rupture of the uterus, the writer thinks, has been a good deal under-estimated, and concludes that dangerous bleeding occurs in 40 per cent. of cases. The risk of hæmorrhage, though greater in complete than in incomplete rupture, is common to both. Serious external bleeding seldom occurs in complete rupture, but is not uncommon in the incomplete variety, but the real risk in both is internal bleeding. The bleeding which follows the rupture usually stops spontaneously, but if the patient survives there is risk of recurrence when the shock passes off and the circulation regains its force. This point is illustrated in Ivanoff's figures. The great majority of deaths from hæmorrhage occurred not immediately, but within from two to twelve hours after rupture—*i.e.*, after repeated hæmorrhage or continuous oozing had occurred. This establishes two points: (1) that the necessity to control hæmorrhage from the laceration must be encountered in a large proportion of cases, and (2) that the severe shock renders the diagnosis of hæmorrhage obscure, and increases the gravity of operative interference. With regard to sepsis, little need be said. Most of the cases met in hospital practice have already been infected owing to prolonged labour and repeated attempts at delivery. But if not infected at the time, the presence of a laceration opening up direct communication between the vagina and the peritoneal cavity or cellular tissue is of the gravest possible danger. Probably 50 per cent. of the total mortality is due to sepsis. Expectant or non-operative treatment has been shown to be attended by a high mortality when applied to cases of all degrees of severity. Different estimates vary from 92 to 60 per cent. The truth appears to be that it is quite unsuitable for severe cases, while successful in cases of slight or moderate severity. When only the lower part of the broad ligament is opened by a laceration of the vaginal vault, cervix, or lower segment, conservative treatment is sufficient, and, unless there is progressive bleeding, drainage only instead of tight packing. For all practical purposes an extensive sub-peritoneal laceration, opening the broad ligament and large enough to admit the whole hand, is quite as formidable as a laceration opening the peritoneal cavity, for autopsy has shown that death from peritonitis, after incomplete rupture, is by no means uncommon. Also it is difficult to tell whether a large rent has opened the peritoneum or not. These reasons justify the grouping of all large lacerations together, whether complete or incomplete. In these cases the expectant treatment, by plugging *per vaginam*, is absolutely unreliable, and tight packing, if employed, will retard the free drainage which is absolutely necessary as a precaution against sepsis, while loose packing will not control bleeding. In the majority of cases of severe rupture the writer believes that laparotomy offers the best chance. Steady deterioration of the pulse and general condition, or relapse after a tem-

porary improvement, are the only signs of continued hæmorrhage likely to be found. Opening the abdomen and securing bleeding points of itself will involve little shock, and having got thus far, the operator has three courses open to him: (1) simply to pack the rent from above and drain both up and down; (2) to remove the uterus and drain down; (3) to suture the rent and drain the pelvis. The first is probably best if the patient is *in extremis*, and every moment of importance, and if the patient rallies further operative treatment could be done 24 to 48 hours later. Hysterectomy has the advantage of fully controlling hæmorrhage and of removing a frequent source of infection, and removes the risk of repetition in a future pregnancy. Kolominkin, in 1903, obtained 140 cases of uterine rupture occurring in series in lying-in hospitals. Of these, 97 were treated conservatively, with 61 per cent. mortality; in 33 hysterectomy was done, with 36.3 per cent. mortality. As regards method, the main point being simplicity, the sub-total hysterectomy is probably best and quickest, and the important point of free drainage is easily obtained through the tear. Suturing of the rent may be regarded with favour from a conservative point of view, but it has the disadvantages of often failing to control bleeding and of leaving a possibly infected uterus; also from the position of the rent the operation may be difficult and tedious. If the uterus is sutured, free drainage must be obtained through a separate incision or through the abdominal wound. F.

**A Series of Ten Cases of Complete Rupture of the Uterus.**—Smith (*Journ. of Obst. and Gyn. Brit. Emp.*, XV., 6).—The writer reports ten cases of rupture of the uterus, treated by conservative methods, with a mortality of 90 per cent. When a series of cases such as this is examined, one asks whether other methods of treatment might not have given better results. In considering the question of treatment, those cases must be eliminated in which death occurred so rapidly that no time was allowed for anything to be done. Of the seven cases which remain, in one the patient's general condition alone was treated; practically nothing was done locally, yet the woman recovered, and has had a full term child since. The woman's condition for several hours was so serious that probably any operative measures would have had a fatal result. In one case where the child had escaped into the abdominal cavity, the abdomen was opened, the rent sutured, and a drain passed into the vagina, but the patient died in 2½ hours after a slight improvement. The cellular tissue was found to be greatly lacerated in all directions, and containing a large hæmatoma. The writer considers that any more severe operation would have hastened the end. Another case, in which the operator had a good view of the edges of the rent, and was certain all hæmorrhage had ceased, was lightly packed with gauze, the woman being too collapsed to have borne any other treatment. She rallied slightly, but died in seven hours. About a pint of free blood-stained fluid was found in the abdomen, and some coils of intestine showed early signs of peritonitis. Labour had been protracted for five days, with frequent attempts at delivery. One case had cancer of the cervix. The author considers that none of these cases would have borne any operative treatment whatever. F.

LIEUT.-COL. G. D. HUNTER, D.S.O., R.A.M.C., has been selected for the appointment of Commandant of the School of Instruction, Aldershot, in succession to Lieut.-Col. C. E. Nichol, D.S.O., and he should take up his duties on November 1st.



## NOTICES TO CORRESPONDENTS, &c.

**CORRESPONDENTS** requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

### SUBSCRIPTIONS.

SUBSCRIPTIONS may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s.; post free at home or abroad. Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially-appointed agents. Indian subscriptions are Rs 15.12. Messrs. Dawson and Sons are our special agents for Canada.

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For ONE INSERTION:—Whole Page, £5; Half Page, £3 10s.; Quarter Page, £1 5s.; One-eighth, 12s. 6d. The following reductions are made for a series:—Whole Page, 13 insertions, at £3 10s.; 26 at £3 3s.; 52 insertions at £3, and pro rata for smaller spaces. Small announcements of Practices, Assistances, Vacancies, Books, &c.—Seven lines or under (70 words), 4s. 6d. per insertion; 6d. per line beyond.

ORIGINAL ARTICLES OR LETTERS intended for publication should be written on one side of the paper only and must be authenticated with the name and address of the writer, not necessarily for publication but as evidence of identity.

CONTRIBUTORS are kindly requested to send their communications, if resident in England or the Colonies, to the Editor at the London office; if resident in Ireland to the Dublin office, in order to save time in reforwarding from office to office. When sending subscriptions the same rule applies as to office; these should be addressed to the Publisher.

DR. H. S. T.—The statement, of which you have reason to doubt the correctness, you may take as the irresponsible affirmation of an over-zealous reformer. The death rate from alcoholism has been steadily declining for years, and last week may be cited as evidence of the fact, only three deaths having been certified as from alcoholism, in a population of nearly seven millions in London and its outer ring.

### REMINISCENCES.

THE following interesting note was sent us by a correspondent: Dr. Dabbs in his magazine, *My Journal*, for July and August, publishes, among other interesting notes and gossip, some reminiscences of hospital life during his student days in the sixties and seventies, when King's College Hospital could boast of such giants on its staff as Fergusson, Henry Smith, John Wood, George Johnson, Alfred Garrod, and Partridge. His references are at times humorous as well as instructive, and as the writer of this paragraph also was personally acquainted with five of the six names mentioned, he might, but for the exigencies of space, add a few lines thereto. The following incident is vividly in his memory. The writer was one day chatting with Sir William Fergusson in his study, and on expressing surprise that the former editor of a medical contemporary, who had hurriedly quitted his post for the United States some time previously, was to be reinstated, Sir William exclaimed in his broad Scotch accent: "Eh, mon, it is sometimes necessary to hold the candle to the devil."

MR. H. M.—We do not give advice by post, nor recommend any particular physician in our columns.

UNDER-SIZED (South India).—The "system" you inquire about is run by a blatant self-advertiser, and we have no possible confidence in it. Your patient had better save his money for better purposes.

### A HOMOEOPATHIC REMEDY.

According to the latest medical theory port, taken in strict moderation, may be of distinct benefit in cases of gout.

Hair of the dog that bit my grandsires shrewdly,  
And is it true, indeed, as doctors say  
When the sharp twinge of gout assaults me rudely,  
That thou mayest help to chase the fiend away?  
I thought that "purple stream" was dammed for ever  
At which my sporting forbears strove to slake  
Perennial thirsts, but now our wise and clever  
Physicians own that this was their mistake.  
Not that I minimise my grandsires' failing.  
I own that even now I feel put out  
At thought of these upon their heirs entailing  
No worldly goods at all but only gout.  
They spent the property they should have left me  
In drinking many times their proper share;  
Of cash and constitution they bereft me,  
And precious little they appeared to care!  
They passed the flowing bowl with song and laughter;  
Their selfishness was utter and profound.  
It was not love for those who should come after,  
But simply wine that made their world go round.  
And even now I think I see them shaking  
With horrid mirth when ghostly eyes reveal  
The spectacle of their descendant taking  
"Two table-spoonfuls with the evening meal."

TOUCHSTONE.—*Daily Mail*.

## Appointments.

BROWN, D. W., M.D., M.Ch.Edin., Certifying Surgeon under the Factory and Workshop Act for the Preston (West) District of the county of Lancaster.

BROWNE, F. J., M.B., B.Ch.Aberd., Certifying Surgeon under the Factory and Workshop Act for the Aberlilly District of the county of Monmouth.

DINGLE, H., L.R.C.P.Lond., M.R.C.S., Certifying Surgeon under the Factory and Workshop Act for the Barmouth District of the county of Merioneth.

JAMES, R. R., F.R.C.S., Assistant Ophthalmic Surgeon to St. George's Hospital.

MAYNE, JOHN FITZGERALD, M.B., Ch.B.Edin., Senior Resident Surgeon at Oldham Infirmary.

WOON, T., M.D., C.M.Edin., Certifying Surgeon under the Factory and Workshop Act for the Leith District of the county of Edinburgh.

GRIFFITH, WILLIAM, M.B., Ch.B.Vict., M.R.C.P.Lond., Assistant Physician to St. John's Hospital for Diseases of the Skin, London.

MCBRIDE, C. A., M.D., C.M.Toronto, L.R.C.P., L.R.C.S.Edin., Casualty Officer to St John's Hospital for Diseases of the Skin, London.

WOODCOCK, LOUISA, M.D.Lond., B.S., Clinical Assistant to St. John's Hospital for Diseases of the Skin, London.

## Vacancies.

Sunderland and Durham County Eye Infirmary, Sunderland.—House Surgeon. Salary £210 per annum. Applications to J. F. Potts, Secretary, Sunderland and Durham County Eye Infirmary, Stockton Road, Sunderland.

Sheffield Union Hospital.—Resident Assistant Medical Officer. Salary £100 per annum, with apartments, rations, etc. Applications to Albert Edwd. Booker, Clerk to the Guardians, Union Offices, Sheffield.

Derby County Asylum.—Assistant Medical Officer. Salary £120 per annum, with board and washing. Applications to Dr. Macphail, Rowditch, Derby.

Camer'n Hospital, West Hartlepool.—House Surgeon. Salary £100 per annum, with board, rooms, and laundry. Applications to J. G. Taylor, Secretary.

Derbyshire County Council.—Assistant Bacteriologist. Salary £150 a year. Applications to Sidney Barwise, County Medical Officer of Health, County Offices, Derby.

St. Mary, Islington, Infirmary, Highgate Hill, N.—Assistant Medical Officer. Salary £130 per annum, with board and residence. Applications to the Medical Superintendent.

Berks County Asylum, Wallingford.—Second Assistant Medical Officer. Salary £150 per annum, with board, furnished apartments, attendance, etc. Applications to Medical Superintendent.

Manchester Hospital for Consumption and Diseases of the Throat and Chest.—Assistant Medical Officer for the new Crossley Sanatorium, Delamere Forest, Cheshire. Salary £100 per annum, with board, apartments, and laundry. Applications to O. W. Hunt, Secretary, Hardman Street, Deansgate, Manchester.

University of Birmingham.—Chair of Zoology. Salary £600 per annum. Applications to Geo. H. Morley, Secretary.

Cotswold Sanatorium, near Stroud, Gloucestershire.—Assistant. Salary £120, all found. Applications to the Medical Superintendent.

The Children's Infirmary, Carshalton, Surrey.—Assistant Medical Officer. Salary £150 per annum, with board, lodging, and washing. Applications to the Clerk to the Board, Embankment, London, E C

## Births.

DEWEY.—On July 20th, at Kingswear, Portsmouth, the wife of E. W. Dewey, M.R.O.S., L.R.C.P., of a daughter.

## Marriages.

BARRIS—MORRIS.—On July 20th, at St. Mary's Church, Sydenham, Oxon., John Davis Barris, F.R.C.S., elder son of Arthur Barris, Esq., to Agnes Margaret Morris, youngest daughter of the Rev. William Morris.

CAUSTON—COLLINS.—On July 20th, at St. John's Cathedral, Portsmouth, Edward P. G. Causton, surgeon, R.N., H.M.S. Cumberland to Mary Catherine Helen, eldest daughter of Charles H. J. Collings late Royal Navy.

COLE—TEMPLEMAN.—On July 20th, at St. John's Church, Weymouth, Percival Pasley Cole, M.B., B.Ch., F.R.C.S., Sub-Warden of Queen's College, Birmingham, to Amy Gladys, younger daughter of T. J. Templeman, Esq., J.P., of Stanton Court, Weymouth.

WHITE—TICHENER.—On July 22nd, at St. George's, Hanover Square, London, Charles Orr White, M.R.O.S., L.R.C.P., son of the late John Orr White, and Mrs. White, of Sunnyside, Norwood, to Edith, younger daughter of Mr. Edward Tichener, of Heath View, Walton, Epsom.

## Deaths.

ARMSTRONG.—On July 25, at Glinockie, Bracknell, Berks, Eliza, widow of Dr. Henry Armstrong, formerly of Peckham, and eldest daughter of the late Dr. Edward Long, of Barham, in her 83rd year.

TO LET.—13, St. Mary's Road, Peckham, for five years occupied by a Doctor. Three reception, five bed rooms, garden, stable. Rent £60. Apply Caretaker.

# THE MEDICAL PRESS AND CIRCULAR.

"SALUS POPULI SUPREMA LEX."

Vol. CXXXIX.

WEDNESDAY, AUGUST 4, 1909.

No. 5.

## NOTES AND COMMENTS.

### The Suggested M.R.C.S. Diploma of Edinburgh.

WITH regard to the diploma qualification of the R.C.S. Edinburgh which has been so much advocated by the Association of Medical Diplomates of Scotland, we publish elsewhere a letter of great importance from Mr. A. G. Bateman, the well-known Secretary of the Medical Defence Union. It appears that in the Medical Act of 1858 the membership is actually mentioned, and apparently the licentiate is not recognised at all. At any rate, the Edinburgh College will find their hands immensely strengthened by this statutory recognition, should they decide upon taking the proposed step. Another point is that an unqualified person was actually prosecuted by the Union for falsely assuming the title of "M.R.C.S. Edin." It would be interesting to learn on what grounds that enterprising person assumed that title—which he must have invented for the purpose, unless, indeed, he was misled by the Medical Act of 1858. The College of Surgeons of Edinburgh will strengthen their position amongst Englishmen, Irishmen and Welshmen by showing more interest in their diplomates after qualification. No more practical means could be adopted in order to consolidate and advance the interests of this ancient Corporation than by instituting a membership diploma, which, by its very creation, would arrest the attention of diplomates all over the world. So far the College has shown little sympathy with the suggestion, but licentiates are hardly likely to let the matter pass into oblivion.

### Food and Drug.

A FEW months ago we recorded a case in which the proprietor of an advertised proprietary preparation called "Antineurasthin" was summoned before a magistrate by the Inland Revenue Commissioners for not having Government stamps on the packets in which the stuff was sold. The defence was that the preparation is a food and not a drug, and that therefore no stamp was necessary. After a long argument, the magistrate found against the Commissioners, and against that decision they appealed. The appeal was heard in the Divisional Court last week, and the same arguments were paraded before the Lord Chief Justice, Mr. Justice Darling, and Mr. Justice A. T. Lawrence. In the course of the case the Solicitor-General for the Commissioners stated that the stuff contained water, milk, sugar, albumen, lecithin, mineral matter, and binding material, but he did not indicate the proportions used. A good deal of fun was made of the advertisements for the various diseases which "Antineurasthin" was good for, but it was finally held

unanimously by the Court that the preparation was a medicine, and therefore liable for duty. Mr. Justice Darling went so far as to say that if plain water was bottled and sold for curing complaints he thought it would be a medicine within the meaning of the statute. Now it is clearly a fraud to sell pure water and advertise it as a cure, and yet, instead of the Treasury prosecuting the vendors, we have a High Court judge averring that, in his opinion, the Government would be competent to share the swag.

### Jury's Censure.

ANOTHER instance in which a medical man appears to have been most unfairly treated by a coroner's jury occurred at Wrexham last week. Dr. Mitchell of that town was sent for one night as he was about to go out to a case, and asked to see a child who had swallowed a halfpenny. He gave the messenger a powder and some directions, saying that he would call next morning, as he could not come that night. No further message was sent to him, and, unfortunately, the child died of hæmorrhage, caused by ulceration of the œsophagus by pressure of the coin. He explained that, even if he had attended, the coin was too far down for him to have reached it, and that, presumably, the same unhappy result would have taken place. The jury found in accordance with the medical evidence, and went on to express the view that Dr. Mitchell had neglected his duty in not attending the deceased at once; in this rider the Coroner concurred, and one of the jurymen was offensive enough to say that if the patient had had a carriage and pair the doctor would have gone quickly enough. The two facts which would seem to have been overlooked are, first that the parents sent no further message regarding the child, and therefore anyone would presume that there was no urgency or distress, and the other that, had the other patient to whom Dr. Mitchell was called died through some similarly unforeseen accident, the jury would probably have found "neglect" in regard to that case. Truly the difficulties of practice are great enough without that ungenerous censure being passed on a medical man whenever an unforeseen catastrophe occurs.

### Female Medical School Inspectors.

THE question of medical women being appointed to public posts is constantly cropping up in one form or another, and a good deal of feeling is often expressed on both sides. It is clear, we fancy, that there are certain posts which women are not fitted to fill, such, for instance, as those of house-surgeons in male

surgical wards, or those on the teaching staff of institutions for instructing male students, but in open appointments, capable of being filled by members of either sex, surely the rule should be that the best qualified candidate should be chosen. Nor do we think it is essentially to the interest of the "woman movement" that less competent candidates are selected for appointments because they are women; in such cases there should be a fair field and no favour. We are led to these remarks by a debate which took place at the Sheffield School Management Sub-Committee last week, on the question of the appointment of a medical man to be assistant school medical officer. Some managers, led by a lady member of the committee, opposed the appointment on the ground that they wished that officer to be a woman, and they brought up the old and unsavoury argument, there was something unfitting or indelicate in medical men examining girls. As these children have probably never been examined by any other than a man doctor when they have been ill, this argument is not only improper but ineffective, and, in our opinion, greatly opposed to the proper interests of medical women. A member of the selection committee stated that though he set out with a strong determination to appoint a woman, the qualifications of the five female candidates were so markedly inferior to those of some of the men that he was bound to support the men. Surely the only argument that should avail in these cases ought to be, who is the most suitable person, man or woman, to fill the post?

**What is a Lunatic?** To regard a delirious patient as a lunatic is a not uncommon popular error. To label him as such and cart him off to a lunatic asylum is a different matter, which should in

no case be undertaken without express medical inquiry and sanction. Some weeks back, Dr. Wynn Westcott, the Hackney Coroner, inquired into the death of a printer, aged 39, who had been certified as a lunatic and removed to the local infirmary, where he died. It appeared that when at work deceased was taken ill with violent pains in the stomach, and had to go home, where he became delirious. His friends, thinking him insane, obtained a receiving officer's order for his removal. The medical officer of the infirmary testified that deceased became violent after admission, and that death was due to heart failure, consequent upon disease of heart and kidneys. The Coroner pointed out that deceased was not really a lunatic, and that it would be a great hardship for a patient to come out of an infirmary knowing he had been certified as a lunatic. This contention seems clear enough, and there can be little doubt that some sort of probation ward is wanted for delirious and violent patients about whose sanity there can be any question. If every delirious person were certified as a lunatic, not only our asylums, but our law courts, would have to be definitely enlarged to cope with the resulting increase of work. Fortunately, however, the ways of the Poor-law are not those of everyday practical life.

**Licking the Rim.** THE sources of contamination of milk on its journey from the udder of the cow to the stomach of the consumer are, like Sam Weller's knowledge of London, extensive and peculiar; all those interested in the sanitary regulation of the milk traffic can give examples of the sources of danger which beset the unwary

milk-consumer, and which, if they were generally known, would put him "off milk altogether." It has been reserved, however, for a correspondent of the *Liverpool Daily Post and Mercury* to unearth a danger which we confess we had not suspected. "This morning," he writes, "as I was walking down Harrington Street, I noticed a certain milkman pouring cream from a bottle into a can, and, in order to remove the surplus cream, he promptly licked round the rim of the bottle. Until this and similar acts are put a stop to, and their perpetrators severely punished, the dreaded consumption germs will continue to thrive in our midst." To our mind, the offence of spitting in an omnibus is a venial peccadillo compared with such a filthy trick as licking the rim of a cream-bottle; but it is difficult to conceive of any law or by-law which could reach those guilty of it. The only remedy we can think of is to report the offender to his master, and we can hardly believe that any dairy proprietor would not give instant notice to an employee guilty of so filthy a trick.

## LEADING ARTICLES.

### THE DECLINING BIRTH-RATE.

THE maintenance of a decrease in birth-rate in most of the civilised countries of the world is a fact that must be reckoned with by all who have to deal with the welfare of nations. The steady increment of a community is, broadly speaking, a sign of that vitality which is necessary for its survival in the struggle for international existence. Should any given country fail in the production of sufficient offspring to compensate for the loss by death, it is at once handicapped by competing nations whose births are in excess of deaths. To a certain limited extent the resulting disability may be compensated by superior race energy and physique, and by the better preservation and stamina of the infantile population, but, on the whole, the general proposition holds good, that the preservation of a moderate increase of population is essential to the stability of any given country. In France the problem has many years since passed into an acute stage. The matter has engaged the serious attention of the French Senate, and is likely to do so again at an early date. It is stated on good authority that there are no less than thirteen hundred childless married couples in France, while the birth-rate has steadily diminished year by year. The actual figures of the excess of births over deaths for the last few years have been:—

1902	...	An excess of 84,000.
1903	...	" " 73,000.
1904	...	" " 57,000.
1905	...	" " 37,000.
1906	...	" " 26,000.

The small overplus of the last year was converted to an actual deficit of 20,000 births in the year 1907. As may be supposed, this state of affairs has led to a good deal of commotion in France. M. de Foville, President of the Academy of Moral and Political Sciences, does not hesitate to assert that the nation is slowly but surely dying. Depopulation, he claims, is no exaggeration, and at

this rate France will soon be ripe for invasion. In another twenty years there will be two Germans for every Frenchman. To this he appends the important conclusion that the cause is political and economic, as well as moral. From his point of view the law is answerable for not a little of the mischief, inasmuch as it is lax with regard to certain methods; it has made divorce ridiculous, and it winks at pernicious teachings. With regard to Germany, Dr. Bertillon, who speaks with authority on the subject, points out that in 1850 France and Germany had an equal number of inhabitants, and that the German population increases yearly at the rate of 845,000, figures that differ in a very striking way with the French shrinkage to a point that has now reached an actual deficit. Many projects have naturally been advanced with a view to meeting the evil. One of the most promising is that of M. Richet, of the Academy of Medicine, who proposes that the State shall pay bonuses on every baby except the first-born. The suggested bonus for the second baby is £20, and that for the third £40. M. Richet believes that this plan, if adopted, would increase the births by 25 per cent. He estimates that the cost to the State would be about £12,000,000 yearly, a sum that he proposes to raise by imposing a 50 per cent. legacy duty on all collateral inheritances and on all estates left by parents to an only child. Another curious course is suggested by M. Paul Leroy Beaulieu, namely, that no person, male or female, should be appointed to any civil service or municipal office unless the parent of three children. At the same time, he advocates an annual reduction of the salaries of bachelor and spinster officials. The very nature of these suggestions proves the serious position into which France has drifted. A somewhat significant feature of the position is the fact that the State is asked by responsible statesmen, partially, at any rate, to provide for its children. That principle is clearly involved in the suggested subsidy for children after the first, and, less obviously, in the proposed condition of tenure of official appointments as regards offspring and marriage. It will probably occur to readers that something remotely suggesting the same principle is included in our present Government's proposal to reduce income-tax inversely to the number of the taxpayer's children. It is desirable that the question of the declining birth-rate should not be lost sight of in the United Kingdom. That there is some cause for alarm is shown by the fact that in Hampstead, one of the healthiest districts in the kingdom, with a death-rate of 8.5 per cent., there is a birth-rate of 14.9, as against 26.5 in England and Wales, and of 27 in the seventy-six great towns. There is little use in bringing our sanitary conditions to an ideal pitch if we permit the country to be slowly depopulated as in France. The question is one of national importance and deserves the careful attention of Parliament.

### MINERS' HEALTH.

AMONG the matters which have not yet attained the general attention they deserve at the hands of the profession is the question of industrial hygiene, which has been allowed to become too much concentrated in the hands of the Home Office officials and the employers immediately concerned. As a matter of fact, the arena of the workshop or mine being limited and under control, provides a *milieu* in which valuable experiments in hygiene can be carried out and checked, whereas most general outside measures, such as those for controlling infectious diseases, break down again and again through the medical officer not having full controlling powers over the large area and population he has to deal with. Unfortunately, the administration of the factory and workshop, from the sanitary point of view, is so broken up between the Home Office inspectors, the certifying surgeons, and the local authority, represented chiefly by the medical officer of health, that what should be everybody's business tends to become nobody's business. When matters of special interest occur they are passed on to the medical department of the Home Office, and usually interesting and valuable reports are produced on the subject, and pressure brought to bear on the employers to right what is shown to be at fault. In the mining department, however, there is no such medical staff at headquarters, and all the immensely difficult problems of preserving hygienic surroundings underground are left to special commissioners, or to chance experimenters. In a valuable paper read at the Leeds Health Congress, Professor Kenwood, Chadwick Professor of Hygiene in the University of London, made some useful suggestions for improving the health of miners. Professor Kenwood has recently visited large numbers of coal mines in England and Scotland, and said he had been much impressed by the inadequate provision made for dealing with the men's dejecta. Now, the most elementary principle in all sanitation is to remove and render innocuous the motions passed by a community, and yet at the present period of the world's civilisation we find these principles being overlooked in such a vital industry as that of mining. In hot and damp mines the danger is even greater than in the cool, well-ventilated ones, but outbreaks of enteric, and in some parts of ankylostomiasis show that apart from general malaise and ill-health caused by the loading of the air with impurities and stenches, specific dangers of a grave character are incurred. It was said by Professor Kenwood, and we have no doubt with truth, that the obstacle to reform lay with the workers themselves, and that to educate these men is a slow process. He suggests that simple latrines should first be erected, and that a sanitary scavenger should be appointed to supervise the working of the arrangements made, and that such official should have a certain course of training to enable him to carry out his duties intelligently. The use of disinfectants, too, is urged by Professor Kenwood, especially in connection with the stagnant pools of water which collect in the main roadways of wet mines. These pools are difficult to remove, are liable to become offensive, the water is often seriously contaminated, and getting disseminated by

traffic is a real source of danger. We hope that these simple and yet most necessary observations will not fall on deaf ears, and that the Home Office will see what arrangements can be made to meet the dangers set forth.

## CURRENT TOPICS.

### "Without Justification."

AN appeal has been made, as some of our readers are doubtless aware, to the public for £35,000, in order to remove the National Hospital for Diseases of the Heart, London, to another site. Sir Henry Burdett, in a letter to the *Times*, on July 30th (reproduced on page 123) condemns the whole scheme as being "without justification." At first sight, the existence of a special hospital for that particular class of disease seems somewhat superfluous, but further inquiry has shown that there is something of argument left to the other side. Sir Henry asks:—"In the name of reason, of economy, of medical science, and of what represents everything that is best in hospital administration, what justification is there to support this appeal for £35,000?" The point of economy may be conceded, and the first and last points are meaningless and begging the question in a way that is not uncommon with philanthropists. As to medical science, it can hardly be denied that the foundation and much of the best work of most of our specialists has been associated with small special hospitals. In the case of the heart there have been great advances of recent years, notably in the surgery of that organ, and there is much yet to be done by skilled and experienced observation and study in a similar direction. Why should the scientific work necessarily be confined to the great hospitals, as Sir Henry Burdett seems to imagine is the case? We are aware that the policy of swamping the small hospitals has been adopted by the King Edward VII. and the Metropolitan Hospital Sunday Funds, and we regard that policy as unjust, impolitic and injurious in a high degree to the interests and progress of medical science. One other point may be put to Sir Henry Burdett. The large hospitals exclude Scotch and Irish diplomats from their honorary medical staff. Is it to be inferred that holders of those qualifications are unfitted to treat heart disease, or are they to submit to the final limitation of their professional career in that direction by abstaining from the smaller hospitals, the portals of which are still, happily, open to men who have been educated in Scotland or Ireland.

### Medical Marriage Certificates

WE learn, with some incredulity, we must admit, from the Paris correspondent of the *Globe* that the State of Washington has enacted that before marriage each of the contracting parties must produce to the registration officer a medical certificate to the effect that he or she is in good health, and the gentleman in question has been sounding eminent French publicists as to their views on the subject. We can hardly imagine that in an individualistic community such as our own any such law is likely to be passed for the next fifty or a hundred years, at any rate, but we have equally little doubt

that as a measure for improving the race and preventing untold marriage misery, it would be highly efficacious. The discussion of the question, however, would do good in this country, if it only drew the attention of parents to the need of looking to the health of the parties which their children are to espouse, as a matter of at least equal importance—let us say—to that of settlements. We suppose not one father in ten thousand, before giving his daughter in marriage, wishes to be satisfied that the future husband is not suffering from chronic gleet, and yet every practitioner must know cases of early deaths and prolonged misery in innocent brides due to this cause. Hardly less grave is the question of syphilis. As regards the girl, too, few men know anything of her menstrual or sexual history, and only find out after marriage that she is practically disqualified for the duties of her state either by physical disability or by aversion. The subject is one whose serious and judicious ventilation would benefit the community greatly.

### L.C.C. Trams and Infection.

MANY papers have been written on the dangers of infection incurred by people travelling in public conveyances, and doubtless the risk is not inconsiderable. It is Utopian to suggest that railway or tram companies should exercise any control over their passengers, for unless a very clear case was made out for their refusing to carry a passenger, heavy damages would be awarded against them. On the other hand, such companies do owe the duty to the public of using every reasonable means to keep down preventable sources of infection. Much more is this the case when the tramway authority is a public body, and we would like to draw attention to the filthy condition which the London County Council tramcars are to be found in towards the evening. What measures are adopted to cleanse the floors and seats of the cars we do not know, but from the results visible to the eye, we suspect that they are *nil*. By six or seven o'clock in the evening the floors of the upper decks of the cars are a mass of dust, torn tickets, *débris* of tobacco, cigarette ends, used matches, and road filth. The whole of these delectable objects are frequently loosely cemented together with expectoration and saliva. Now, these hours are just those when the tramcars are most crowded with working people returning home, and each fresh entrant raises a cloud of bacteria-laden dust, to be wafted into the mouths and nostrils of his tightly-packed fellow passengers. Even the private companies, such as those owning the "tubes" have their carriage-floors washed out every few journeys, but the London County Council seem to consider themselves above such prosaic duties. We beg earnestly to call their attention to this improper state of things, and to remind them that not only are they a tramway authority but the chief sanitary authority for the county.

### Medical "Spies."

THE differing views taken by County Court judges as to the qualifications for impartial medical witnesses are interesting. Judge Bryn

Roberts has several times remarked that he attaches little weight to the evidence of colliery doctors, unless they have kept notes of the cases they attend, and that he likes to hear the evidence of the medical man who has actually had the patient under his care. In contrast with this, we have a recently-expressed view of Judge Dodd, who lately stated that, "although it was no business of his, he (His Honour) would like to make an observation, because it might act as a guide to doctors as to the rule hospital doctors ought to employ. It was a matter of general importance, because it was quite plain that if hospital doctors were to act as spies upon patients, and report the condition of a patient from time to time to his masters, or anybody with whom he might be in litigation, it would be a very dangerous thing for working-men to go into hospitals." Now, it is very difficult to please judges, who naturally differ as much as other men, and hold their own individual views as strongly as persons unlearned in law, but it seems to us that if our judges like to hear the evidence of the doctor attending a patient, and another casts such aspersions as that quoted in the evidence of the same kind, the only course is to select evidence that will suit the particular judge before whom a case is to be tried. To admit that principle, however, seems to us a most dangerous one. It is a natural and common action on behalf of employers to write to a hospital medical officer to ask for a report as to a patient's condition, and such reports are not usually coloured in favour of the employer. An independent expert is a useful factor in a case, no doubt, but the report of a medical man who has watched a case is most valuable, and it surely cannot be "spying" to give such a report, unless undue advantage is taken of the judiciary position held. And we imagine hospital medical officers will resent imputations on theirs as much as Judge Dodd would on his own.

#### Conscription and Physicians.

THE advocates of conscription urge as one of their arguments that compulsory military training would do much to improve the physique and development of the manhood of the nation, and we notice that, at the recent Leeds Health Congress, Dr. George Newman is reported to have argued that the race could not be regenerated by this means. Believing as we do that there is no particular need for regeneration in the race of Britons, although there may be plenty of room for further individual development, we do not advocate or deprecate conscription on the grounds of health. There are doubtless advantages and countervailing disadvantages in compulsory or voluntary schemes of enlistment in a Territorial Army. We do think, however, that the questions are best left alone by medical men—as they are highly contentious, political propositions, and there is nothing more calculated to cast discredit on the science of hygiene than for it to be allied, or thought to be coloured by any particular party complexion. The education controversy has illustrated, if further illustration were needed, how much discredit can be cast on religion, and how much religious difficulties are magnified when they become allied with parties in the State, and we conceive there is great danger to the promotion of

pure hygiene if it ever finds itself the badge of a political section. Science, like religion, flourishes best by devotion to the interests of the individual, and, happily, there is not much difference in the political parties as to the value of advice on sanitary questions. We trust the day is far distant when hygiene will cease to be a pure, though practical, science, and when men will attach experts in sanitation to their side for any but purely scientific reasons.

#### PERSONAL.

THE King has approved of the appointment of the following gentlemen to the consulting staff of the King Edward VII. Sanatorium, Midhurst: John Mitchell Bruce, Esq., M.D., F.R.C.P., Bertrand Edward Dawson, Esq., M.D., F.R.C.P.

THE King has been graciously pleased to approve the appointment of Surgeon-General W. L. Gubbins, C.B., M.V.O., Deputy Director-General, Army Medical Service, to be Director-General, in succession to Surgeon-General Sir A. Keogh, K.C.B., Honorary Physician to his Majesty, when the latter vacates the appointment.

PROFESSOR J. MICHELL CLARKE, M.D., F.R.C.P., has been appointed Pro-Vice-Chancellor of the University of Bristol.

THERE have been 59 fresh cases of cholera and 19 deaths in St. Petersburg since July 27th. The total number of cases under treatment is 733.

DR. J. RONALD CURRIE, Assistant Medical Officer of Chester, was last week appointed Medical Officer in succession to Dr. A. E. Thomas, resigned.

MR. JORDAN LLOYD, who has lectured on operative surgery for twenty years, has been appointed one of the Professors of Surgery in Birmingham University, to succeed Mr. Bennett May, who has just resigned.

DR. ARTHUR ROBINSON, Professor of Anatomy in the University of Birmingham, has been elected to the Chair of Anatomy in Edinburgh University, rendered vacant by the death of Professor D. J. Cunningham.

DR. GEORGE OGILVIE, Senior Physician to the French Hospital in London, entertained at dinner at the Reform Club the party of French physicians and surgeons now on a visit to this country with the object of studying our hospital administration and methods.

THE Baly medal, founded by Dr. F. D. Dyster in 1866, has been awarded to Emil Fischer, Ph.D., Professor of Chemistry in the University of Berlin, by the Royal College of Physicians of London; and the Moxon medal, founded in 1890, to Sir William R. Gowers, M.D., F.R.S.

DR. ELLIOT SMITH having presented to the museum of the Royal College of Surgeons of England some specimens from Egypt illustrating the earliest known examples of tuberculosis, cleft palate, etc., was accorded a special vote of thanks by the Council at its meeting on Thursday last.

DR. H. D. ROLLESTON will give an oration entitled "St. George's and the Progress of Physic," at the St. George's Hospital Club, on October 1st. In the evening the annual dinner will take place in Prince's Restaurant, Mr. Marmaduke Sheild, Consulting Surgeon to the Hospital, being in the chair.



# A CLINICAL LECTURE

## ON

### HEREDO-SYPHILIS. (a)

By D'ARCY POWER, F.R.C.S.Eng.,

Surgeon to, and Lecturer on Surgery at, St. Bartholomew's Hospital.

GENTLEMEN,—I want to lecture to you to-day on a case of congenital or heredo-syphilis. The boy who is coming in is aged 15, and he was admitted under my care into the Henry ward on May 11th, suffering from a discharge from the right ear. He was admitted in order that you might see how congenital syphilis wrecks, both physically and mentally. He should be an object-lesson, causing you to harden your hearts in future years when a man who is, in your opinion, insufficiently cured of syphilis, comes to you and asks permission to marry. Though this boy, as I have said, is fifteen years of age, he looks no more than seven or eight. There are no signs of puberty, and his emaciated and misshapen body is hardly sufficiently developed to carry his large and rather intellectual head. His mother tells us that he is the only child, and that she has never again been pregnant. Both father and mother are said to be healthy; there is no history of syphilis to be obtained. The mother, though well-grown, had knock-knee when she was young. This boy was born healthy, and was bottle-fed. He is said to have had a cold, with snuffling, soon after his birth, but it does not seem to have needed any specific treatment, and the mother only recalled it to mind when she was questioned. The milk teeth appeared naturally, but rather later than usual, and at eighteen months the child began to walk. It was noticed at this time that he was well-formed, except for a slight increase in the curvature of the spine. The chest was natural, and the legs were straight. Eighteen months later, when he was three years old, the spinal curvature had increased to such an extent that a poro-plastic jacket was put on; and at seven years old an attack of scarlet fever was followed by bending of the legs and other marked symptoms of rickets. The bending of the legs increased until the child had double knock-knee at the age of nine, with five inches separation between the two internal malleoli. Macewen's operation for osteotomy was then performed on each femur, and the *genu valgum* was rectified. There was no suspicion at this date that the child was other than rickety. He was sent to school, and soon attained a good position, showing a special aptitude for drawing, and gaining a prize for general progress. He never suffered from any inflammation of the eyes, but he had a discharge from his nose for many years.

Four years ago, that is, when he was eleven, he became deaf in both ears. There has been a discharge from the right ear for four years, but he has never had any discharge from the left ear. Seven days before his admission he was seized with a very sharp pain in his right ear, which passed off in twenty-four hours, but left him dull, restless and sleepless. The discharge from the ear increased in quantity and became more watery.

As some of his trouble seems to be due to his

deafness, I asked Mr. C. E. West, our aural surgeon, to examine his ears, and he reports that "the deafness in the left ear without discharge, and the period of incidence of the deafness, are in favour of inflammation of the labyrinth. This is probably bilateral, and there is in addition a suppurative inflammation of the middle ear."

That is the history of the case, and he would be classed as a case of syphilitic rickets. I want to point out the difference between syphilis and rickets, and to show you that one has no business to use the term "syphilitic rickets" any more than one ought to use the term "gonorrhoeal rheumatism." The more we know of the pathology of syphilis and of rickets, the more obvious it is that the process which has given rise to the changes in this boy are absolutely and wholly distinct from rickets.

First of all, you know that our diagnosis of hereditary syphilis is based upon three great points, points which are known as "Hutchinson's tripod," because Sir Jonathan Hutchinson was one of the first persons to describe them. They are: disease of the eyes, disease of the teeth, and disease of the ears. You must not expect that in any individual case you will get all these conditions. You will see that this boy has got two of them well marked. He is deaf, with that peculiar kind of deafness which comes on at the time when puberty usually manifests itself—i.e., between the tenth and twelfth year. As a rule, the change comes on very rapidly. This boy heard quite well at one date, and three months later he was as deaf as he is now. This deafness in heredo-syphilis may or may not be associated with middle-ear disease, but it is incurable. It is true labyrinthine deafness, and that condition the boy has at the present time. He has not the typical Hutchinsonian teeth, for Hutchinsonian teeth are smaller than usual, irregularly developed and ill-developed. The central incisors of the permanent set are notched. This boy has the notching, but not the irregularity. His teeth are well developed, but he has a giant central incisor which dwarfs the rest. There is not yet any interstitial keratitis, but it may still appear, because it usually occurs about the same time as the onset of the deafness. His bone changes are very marked. You can see, even from a distance, what marvellous alterations have taken place in his sternum. Instead of being flat, it has become raised into this great bridge, which you can use as a handle to lift his body off the couch. The long bones are markedly altered in shape, and the changes are most marked at the epiphyses, which are enlarged, as they would be in a rickety child. The upper epiphyses about the elbow are also enlarged, a very rare occurrence in rickets, if it occurs at all. The long bones are deformed at both ends in syphilis, but only at one end in rickets. It was thought, before looking at the other bones, that he had ordinary *genu valgum*; and one felt the more sure of that because his mother said that when she was young she had herself bad knock-knee. But even then one ought not to have over-

(a) Delivered at St. Bartholomew's Hospital on Wednesday, June 23rd, 1909.

looked the fact that the ankles are as badly affected as the knees, and that both upper and lower extremities are involved. When you examine the metacarpal and metatarsal bones, you find he has some thickening of the epiphyseal ends, where marked changes are still taking place. You never see that in rickets. His colour is characteristic; he is very pallid. Syphilis manifests itself by an extreme hæmolytic; the red cells are broken up and destroyed at a very early period of the syphilitic changes, and he has thus got the waxy pallor of a syphilitic subject. In some cases of syphilis the hæmolytic is marked by hæmoglobinuria, but so far as we know he has not suffered in this manner. He has not the ordinary rickety back either. It bends somewhat, but when you turn him over the prominence does not disappear. That would remind you of Pott's disease, which is tuberculous. But this prominence of the spine and the falling together of vertebræ in front also occurs in heredo-syphilis.

His mental condition is a very remarkable one; he is now almost imbecile. Though he can make himself understood, he seems to have largely lost the power of speech. Yet he has really been a very talented boy; this book shows that he has been able to draw very nicely, while his writing, as you see, was very much better than my own, and is far above the average. And that is another point in favour of syphilis as the cause of his troubles. It has been very difficult until lately to determine how far the mental deterioration in these cases has been due to the deafness, and how far to the changes which are taking place in his nervous system. Much work has been done lately to enable us to distinguish between the two. A boy who suddenly becomes deaf is largely cut off from all his surroundings; but even then a boy ought not to lose his intellectual capacity, as this boy has done. We are now able to distinguish syphilitic deterioration from that due to deafness by Wassermann's test. If you examine the cerebro-spinal fluid and find evidence of leucocytosis in that fluid, you are fairly sure that you are dealing with mental deterioration due to cerebral changes, and not merely to deafness. In a few years this boy's condition will have passed from bad to worse, and he will either become a general paralytic, or will have some tabetic condition. Our observations are not yet complete, but if the cerebro-spinal fluid does not give the Wassermann reaction we may be able to educate him, and perhaps obtain satisfactory results. I am afraid, however, that this is the beginning of juvenile general paralysis. And "juvenile" leads me to remark once more that you would take this patient for a boy of eight or ten, whereas he is fifteen. His nose is suspicious of syphilis, and I think you may regard him as a well-marked but rare case of heredo-syphilis. You never saw a rickety boy with such a well-shaped chin, nor such a good head; and although rickety children have protuberant foreheads, they have small faces and weak jaws.

The reason for laying stress on the differences between rickets and syphilis is on account of the difference of treatment which is required. You would be very apt—unless you were warned—to regard a case like this simply as one of rickets and to treat it by ordering the administration of fats, and by telling the mother to send the child as much as possible into the fresh air. Unless you recognise the syphilitic element, no thought would be given to the infection by spirochætes which are working such havoc with the tissues, first with the bones, and now, unfortunately, with the nervous system. Care and attention to the points about

which I have told you will enable the diagnosis of syphilis to be established, and as soon as this is done mercury is given, the spirochætes are killed, and the formation of fibrous tissue, which is the destructive agency in the bones and nervous system is thereby prevented. But when once the fibrous tissue is formed, nothing will avail to cure, and the patient becomes a useless member of society.

Learn, then, from this boy that a patient may show very little evidence of syphilis until he arrives at the age of puberty. This delayed appearance of syphilis in its worst forms is well recognised by those who see many cases of syphilis, and it is known to them as *syphilis hereditaria tarda*. Such a patient, like this boy, is born apparently in good health sometimes of parents who would not be suspected of syphilis, and from whom no history of the disease could be obtained, even if it were desirable to ask for one. The child is bright and healthy for the first few years, and then there comes a change which is attributed to some trivial cause—a fall, a cold, influenza, scarlet fever, even the onset of puberty itself. Any condition, in fact, which leads to some impairment of vitality, whether it be physiological or pathological, is sufficient to call into action the latent virus of syphilis. Why or how syphilis lies dormant are matters which pathologists are only now beginning to explain. They tell us that during the long latent periods of syphilis the spirochæte is probably in some intracellular resting stage, when it is harmless, but ready to start into activity and to multiply rapidly after slight changes in the cells which harbour them.

Treatment, if it is to be effective in curing the patient, must be continuous. A few years ago, if this boy had come to the hospital, we should have given him grey powder two or three times a day, and as soon as his snuffles had ceased or his back had become a little less painful we should have said that he was cured. His symptoms, in other words, would have been treated, and not his disease. To cure the disease it is necessary to persist with mercurial treatment not only for months, but for years. The treatment may be interrupted occasionally, but the object of modern treatment is to have small quantities of mercury circulating in the blood for long periods of time, rather than to give large doses for a short time. The best way to give mercury is by means of intra-muscular injection, and it is always best to begin with calomel. This boy has had half a grain of calomel once a week whilst he has been in hospital. It has been injected deeply into his gluteal muscles in the form of a cream, made up with creosote and camphoric acid so that the injections may be painless. I think that he is a little better for them, but his condition was nearly hopeless when he first came under our notice. When the mercury cannot be given by intra-muscular injection, as, for instance, when the mother objects to the pin-prick which is necessary, it is better to order the mercury by inunction if you are treating children in private, because it will be persisted in for a longer time, and will be done more thoroughly than if powders or tabloids are recommended.

The prognosis for this boy is bad. I think he will go from bad to worse, his intelligence will still further deteriorate, he will become a general paralytic, and from this condition he will be mercifully relieved by death, due, perhaps, to pneumonia or phthisis.

You have not wasted your time to-day, gentlemen, if you have learnt that some cases of "rickets" are really syphilitic, and should not be called rickets at all.

NOTE.—A *Clinical Lecture* by a well-known teacher appears in each number of this journal. The lecture for next week will be by Horace Law, M.D., F.R.C.S., Surgeon to the Throat Department of Adelaide Hospital, Dublin, and Consulting Throat and Ear Surgeon to the Stewart Institution. Subject: "Adenoids; Some Causes for their Enlargement and Reasons for their Removal."

## ORIGINAL PAPERS.

### ON IMMUNITY. (a)

BY PROFESSOR ELIE METCHNIKOFF,  
Of the Pasteur Institute, Paris.  
[SPECIALLY REPORTED FOR THIS JOURNAL.]  
(Concluded from page 89.)

As explained earlier, the bactericidal action of the complements is intimately associated with another category of substances—viz., Ehrlich's amboceptors. Incapable of destroying or damaging the infective agents, the amboceptors impregnate them and promote the bactericidal function of the complements. While, however, the latter are localised in the phagocytes, the amboceptors exist in the humours of the living organism and readily pass into the liquid that accumulates round the microbes. These are unquestionably humoral substances that play a part in the mechanism of immunity. Nevertheless, these amboceptors are, after all, only phagocytic substances excreted into the blood, and passing thence into the humours. This has been established by several observers, who have shown that the origin of the amboceptors is in the spleen, bone marrow, and lymphatic glands—i.e., in organs containing an abundance of phagocytes. It has been shown indeed by Wassermann and Citron that the amboceptors take origin on the very site of introduction of infective microbes, just where large numbers of phagocytes are found.

In the early stages of the researches bearing on the amboceptors, it was believed that they were substances which helped to destroy the microbes, though foreign to the system of phagocytic defence, but after a time it was made clear that, since they were phagocytic products, the amboceptors were only one factor in this defence.

The exact mode of action of the amboceptors on microbes is unknown, so little marked is it; in fact, the infective agents impregnated with amboceptors go on living and multiplying, as usual, and they actually retain their pathogenic properties, only they are now amenable to the action of the complements, and are more liable to be seized and enveloped by the white corpuscles.

In the case of very fragile microbes, such as the cholera vibrios and their congeners, the combined action of the amboceptor and the complement brings about the destruction of the bacteria, accompanied or not by their granular transformation. The great majority of pathogenic agents, however, are able to resist the action of a mixture of these two substances as obtained outside the body in blood serum, so that in this instance there can be no question of any bactericidal action, strictly speaking. But, impregnated as they are with amboceptor and complement, the microbes readily become the prey of the white corpuscles, the mixture of these two substances being specially to prepare the way for phagocytosis. On this account Wright has applied the term *opsonin*, and Neufeld the term *bacteriotropin* thereto.

Having made up their minds as to the trivial importance to be attached to these agents in the destruction of infective microbes, the partisans of the humoral theories now fall back on the opsonins and bacteriotropins as humoral factors which play a great part in immunity. Incapable as they are of inflicting the slightest damage on the microbes, their only effect is to facilitate their absorption by the phagocytes. Sir A. Wright, who has especially elaborated this theory, insists on the subordinate part played by the white corpuscles, which, in his opinion, merely respond obediently to the indications of the opsonins. He even

measures the progress of immunity and recovery by the opsonic power of the blood serum. But, insisting on the preparation of the morbid agents by the opsonins, Wright admits the function of the phagocytes in getting rid of the microbes; he even admits the possibility of spontaneous phagocytosis taking place without the intervention of the opsonins, the latter nevertheless playing an important part in accelerating and facilitating this function of the white corpuscles.

It is highly probable *à priori* that the phagocytosis—i.e., the digestion of the microbes by the phagocytes—is subordinated in the organism to influences that favour this process. In intestinal digestion the secretion of pancreatic juice is promoted by other elements, such as *secretine*, so that there is no fundamental objection to the theories of Wright and Neufeld. The only thing against them is the method on which they were founded. All the researches bearing on opsonins and bacteriotropins were carried out with humours and white corpuscles withdrawn from the organism and mixed with microbes *in vitro*. This method of demonstration cannot throw any light on what actually takes place in the living organism. The fate of the theory of the bactericidal properties of the humours, based on experiments *in vitro*, might well serve as an object-lesson to warn us against results obtained by such means. If it be true, as admitted by numerous investigators, that opsonins and bacteriotropins are mixtures in various proportions of complements and amboceptors, it is not difficult to conceive that the mode of action within the organism may be something quite different to that which takes place *in vitro*. We have already called attention to the fact that the complements are contained in the phagocytes from which they do not escape under normal conditions.

In researches on opsonins and bacteriotropins, researches conducted under the empire of humoral views, attention is usually directed only to the action of the blood in favouring phagocytosis. The white corpuscles are looked upon as constant elements which have only to obey the injunctions of the opsonins. But white corpuscles are living organisms which are extremely sensitive to external conditions, and vary within very wide limits. The slightest change in the saline contents of the ambient liquid is sufficient to modify phagocytosis in a very marked degree. The white corpuscles of persons suffering from different diseases display a pronounced diminution of their vital properties. According to Dr. Perou, half the cells of a person suffering from myelogenic leucæmia are deprived of the power of seizing microbes.

In view of these data, several observers have insisted on the necessity of investigating the phagocytic function of the white corpuscles, as well as the opsonic properties of the blood serum. There is all the greater reason for this, seeing that the destruction of microbes plays the principal part in the struggle of the organism against infective agents.

Now this destruction is effected by robust, living phagocytes. Although the absorption of the pathogenic bacteria by the phagocytes, an act favoured by the opsonins, is a step of great importance, it is, after all, only one step in a whole series of phenomena which culminate inside the phagocytes in the digestion of the microbes. When the latter, after absorption by the white corpuscles, do not die owing to a lack of bactericidal substances, the organism remains in a state of inadequate defence, and succumbs to the infection. Certain very resistant microbes, such as the spores of the tetanus bacillus, may remain a long time inside the white corpuscles without giving rise to this terrible malady, but directly the corpuscles are subjected to any injurious influence, such as a chill or overheating, the spores, until then imprisoned, burst their bonds, wriggle themselves free, and promptly determine fatal tetanus.

These data will explain why, as pointed out by several physicians, the opsonic power alone does not afford a trustworthy indication of the resistance of the organism.

Subjected to all sorts of influences, favourable or otherwise, the phagocytes, in their attack on the microbes, have to reckon with the resistance of the infective agents. In some instances the latter secrete

(a) Address delivered at Stockholm under the provisions of the Nobel Trust.

substances that damage the white corpuscles to such a degree as to cause them to disappear altogether. More frequently, however, they are merely damaged to the extent of becoming unable to absorb and destroy the microbes. These substances, aimed at the phagocytes, have been termed *aggressins* by Dr. Hail. They are said to be special poisons which electively attack the phagocytes. In order that our defensive cells may discharge their function adequately they must be protected against the microbial aggressins. It has even been surmised that salutary phagocytosis can only take place by the aid of some preparatory action of a kind capable of neutralising the aggressins, an action derived from the elements of the intruders. Now it appears from a large number of observations that the white corpuscles very readily absorb the aggressins without the latter undergoing any change. Wassermann and Citron's researches show that the secretions of pathogenic microbes elaborated outside the organism yield a product which, when introduced in large amounts into the organism, interferes with phagocytosis. But the very microbes that produce these aggressins are readily absorbed by the white corpuscles when in a state of unconstrained activity.

The phagocytes are capable not only of struggling against the aggressins—i.e., against the microbial poisons acting specially on the white corpuscles, but even against violent poisons capable of killing the organism. This is a point of the greatest importance in the study of immunity. After the admirable discovery by Behring of bacterial contra-poisons, the view was put forward that the defence of the immune organism lay more particularly in the neutralisation of the toxins produced by the microbes. The latter, consequent upon this neutralisation, are deprived of their principal arm in the attack on the organism, and forthwith become absolutely inoffensive beings, which readily become the prey of the phagocytes—in other words, phagocytosis, though brought to bear on living microbes, would be reduced to an act of altogether secondary importance.

Numerous carefully worked-out data are altogether in opposition to this view. It has been amply demonstrated that white corpuscles do not fear microbial poisons, readily absorb them, and render them inoffensive. This was specially well shown in investigating the poisons in the bodies of infective microbes known as *endotoxins*, and Besredke's researches on this point are quite conclusive. When he injected into the peritoneal cavity of the guinea-pig typhoid bacilli that had been killed and rendered incapable of giving rise to infection, the typhoid endotoxin proved fatal to the animal in the course of twelve hours, but when he repeated the experiment with animals whose abdominal cavities contained a large number of robust white corpuscles, these seized upon the microbial bodies and thus saved the animals from certain death.

Bail and Weyl obtained similar results by employing the poison of the staphylococcus. Injected alone, the poison killed young rabbits in a few hours; injected along with a certain quantity of white corpuscles the poison produced no effect, and the animals survived.

Similar observations might be multiplied almost indefinitely, and they pave their way to the conclusion that phagocytes not only secure immunity against infective microbes, but also against the poisons secreted by them. Of all the elements of the organism, the phagocytes are distinguished by their comparatively refractoriness to intoxication.

This is so markedly the case that white corpuscles may even resist poisoning by mineral poisons. At a time when the properties of endotoxins were imperfectly apprehended, when, too, the search for soluble bacterial poisons in the organism presented extreme difficulty, Besredke set to work to ascertain the protective part played by the corpuscles towards comparatively insoluble arsenical salts. For this purpose he took the trisulphide of arsenic, the crystals of which are readily absorbed and modified by the phagocytes. He was enabled to satisfy himself that when the peritoneal cavities of his guinea-pigs contained plenty of white corpuscles, they preserved the animals from fatal poisoning by phagocytising the crystals of trisulphide of arsenic. Since then similar observations have

been repeatedly made, and it is now generally recognised that many toxic and medicinal substances, when introduced into the organism, are taken up by the white corpuscles and can be detected within them. Still more recently Dr. Carles, of Bordeaux, demonstrated the absorption of salts of lead by the white corpuscles. These salts, absorbed in an insoluble state, become transparent inside the phagocytes, but when these are exposed to the vapour of sulphuretted hydrogen, they turn black. In seizing the poisons, the white corpuscles, as primitive elements comparatively refractory to intoxication, preserve the noble parts—the nerve, hepatic, and other cells—from injury.

The data at our disposal authorise the unhesitating conclusion that the phagocytic system constitutes the principal defence of the organism against every kind of infective agent, as well as against their toxins. The natural immunity which man possesses against many diseases depends on the ability of the phagocytes to absorb and render innocuous the infective microbes. It is unnecessary to mention that the phagocytic reaction derives every assistance it can from the organism. For instance, when infective microbes gain an entry, the white corpuscles avail themselves of vascular dilatation and nervous influence that dispatches them to the field of battle, and every possible influence is thus brought to bear.

In immunity acquired by vaccination, or after an attack of the disease, the organism presents a whole series of modifications. Stress has been laid on the enhanced properties of the humours under these conditions, and, in point of fact, the blood serum is found to contain large quantities of amboceptors and bacteriotropins (probably identical), which prepare the microbes for undergoing phagocytosis. But, as already shown, the amboceptors are phagocytic products, and for them to be poured out in large quantities into the humours, the phagocytes must have undergone modifications within the organism that has acquired immunity. This fact, which might *à priori* have been anticipated, is not easy to demonstrate in an exact manner. It occurred to Mr. Petterson, with this object in view, to introduce into the organism white corpuscles from animals vaccinated against certain diseases. He found that these elements afforded protection against quantities of infective microbes many times superior to that required to cause death. On the other hand, the white corpuscles of organisms not possessed of immunity were powerless to produce this result.

In view of the great importance of this fact, Salimbeni instituted a series of experiments at the Pasteur Institute in order to verify Petterson's results. By means of an extremely exact method, he was enabled not only to confirm, but even to extend its scope. He showed that the white corpuscles of the immunised organism are the actual source of protective substances, and that, too, at a time when the blood serum presents no change whatever. In spite of repeated washings, the phagocytes were still capable of affording immunity. In the course of these researches Salimbeni demonstrated that at a time when the humours had already completely lost their protective qualities the organism nevertheless remained refractory and resisted fatal doses of infective microbes. This fact, along with many others of the same kind, yielded a result of the greatest importance—viz., that even in acquired immunity the cellular properties preponderate over the humoral properties.

This being so, it may appear paradoxical that, in spite of the profound modifications which they have received in the organism, the white corpuscles display no increase of their phagocytic function, properly so-called. They absorb the infective agents just to the same extent as white corpuscles withdrawn from a normal organism when they are brought into contact with the humours of the immunised organism. Since the earlier researches of Denys and Leclef, various observers have insisted on the accuracy and the importance of this discovery. It must not be forgotten that these experiments were carried out with white corpuscles withdrawn from the organism and studied *in vitro*. Notwithstanding all that has been said on this point, this objection must be sustained. They are comparing the phagocytosis of the white corpuscles

of an organism subjected for weeks and months to vaccinal injections, and kept all this time in captivity with the white corpuscles of a fresh organism which has not been tampered with, so that it is obvious that the conditions are far from being identical.

But even if it had been established for certain that in acquired immunity the property of the white corpuscles to absorb microbes was in no wise modified, this result would in no way invalidate the existence of a general increase of the defensive power of the phagocytic organism. We should merely have to admit, as in acquired immunity, that there is no increase in the production of complements, so there is no enhanced power of absorption. The augmentation in the defensive power merely amounts to a super-production of preparatory substances by the phagocytes.

The totality of the phenomena observed in immunity may consequently be reduced to a series of biological acts, such as the sensitiveness of the phagocytes, their active movements towards places threatened by invading microbes, and to a series of chemical and physical acts which determine the destruction by digestion of infective agents. For a dozen years past, under the empire of Ehrlich's theories, numerous observers have applied themselves with great zeal to the elucidation of the intimate phenomena of immunity. Ehrlich himself assumed that the amboceptors, which are present in abundance in acquired immunity, combined in exact proportions with the complementary molecules, on the one hand, and with those of the microbes—*i.e.*, their receptors—on the other. Various authorities, M. Bordet at their head, challenged this theory. According to these, the amboceptors are not deserving of their name because they do not act the part of chemical go-betweens of the complements with the microbes, but act on the latter like a mordant in dyeing textures. Bordet, therefore, calls these substances "sensitisers," in virtue of their property of promoting the action of the complements on the microbes. The whole process, in his view, belongs to the category of phenomena of molecular absorption taking place in variable proportions.

During the ten years or so during which the two theories were under discussion, the delicate and complex problem of the intimate mechanism of immunity has not even now been finally settled. It is only fair to state, however, that several modern authorities maintain the view that the action of the organism on the microbes does not belong to the category of chemical phenomena, properly so-called, but is rather of the nature of the physical action of colloids, some of which emanate from the microbes, while others belong to the organism. Attempts have been made to establish an analogy between substances met with in immunity and colloids, and sundry authorities are almost on the point of admitting that the complements are lipoids similar to those entering into the composition of animal organs.

These researches justify the hope of results of the highest importance in the near future, but for the time being they are merely incursions on a domain strewn with all sorts of difficulties. The part played by the phagocytic system, on the other hand, has survived the period of probation, and is now a firmly established doctrine.

The question now arises whether the data accumulated by so many years of patient study and ardent debate are capable of application in medical practice. The general law that in all cases of immunity the phagocytic reaction is well marked, leads us to the conclusion that the degree of phagocytosis may assist in prognosis. Ever since I began the study of phagocytosis I have convinced myself that the more microbes are absorbed by the white corpuscles, the greater are the chances of recovery. A distinguished Swiss veterinary surgeon, M. Zschokke, was the first to apply this rule in combating contagious mammitis of cows. He showed that free phagocytosis of the streptococcus, the infective agent of the disease, indicates a mild course, and therefore a favourable prognosis. The fate of cows attacked by "gelber galt" depends on the intensity of the phagocytosis, and when this is feeble the cows are sure to die. Subsequently, however, it was found that in some instances the cows did not recover in spite of the fact that most of the

streptococci were inside the white corpuscles. These exceptions induced Mr. Vrijburg to undertake further investigations. Just as one might have anticipated in accordance with the phagocytic theory, the victory of the organism over the infective microbes entails not only their absorption by the white corpuscles, but also their ultimate destruction. Now cases were met with in which the streptococci of contagious mammitis, after absorption by the phagocytes, broke up the cells and got free, being thus enabled to continue their lethal work. To justify a good prognosis we must not only ascertain the degree of phagocytosis, but also establish the condition of the corpuscles and the contained microbes. This example ought to serve as a lesson to those who imagine that it is sufficient to ascertain the opsonic power to be able to forecast the course of the disease or the acquisition of immunity.

The degree of phagocytosis may also serve as a guide in other diseases due to the streptococcus. Professor Bumm, of Berlin, for instance, states that in puerperal fever marked phagocytosis is indicative of approaching recovery, whereas ill-marked phagocytosis authorises the worst fears.

In the treatment of disease by vaccino-therapy, suggested by Sir A. Wright, phagocytosis enables us to measure the opsonic powers of the blood, and this may be of service to the physician. We have already mentioned that this method is now gradually being supplemented by the determination of the property of the phagocytes independently of the opsonic action, properly so-called, and for some time past phagocytosis has been employed with success in the diagnosis of certain infectious diseases.

Among the practical applications of the phagocytic doctrine may be mentioned the application in surgery of substances capable of attracting a large number of white corpuscles to the field of operation threatened by infection. Several surgeons in France and Germany introduce into the abdominal cavity of their patients superheated blood, nucleic acid, or other substance, for the purpose of bringing an army of white corpuscles to bear on the microbes, and the results are so encouraging that we may look forward to a fresh step in dressing methods in the near future. At the beginning of the new era in surgery, one's whole attention was concentrated on the microbe, and the subjects were inundated with antiseptics, but it was soon discovered that these poisons are dangerous to organisms which require to be handled gently, so antiseptics gave place to asepsis. Now we know that phagocytosis is of valuable assistance in the defence of the organism, endeavours are being made to modify surgical methods so as to turn to account means of increasing the number of phagocytes.

Among therapeutical methods of recent introduction must be mentioned that of Professor Bier, which consists in the methodical application of dry cupping for the purpose of increasing venous stasis round abscesses, etc. How are we to explain its success? Although all contradictions have not yet been explained away, the general view is that phagocytosis is an important factor in obtaining a cure by this method.

It is not surprising, in view of all we know on the important part played by phagocytosis, that zealous search is being made for conditions capable of reinforcing phagocytic action, and numerous communications have appeared on this subject of late. Among substances that stimulate phagocytosis is quinine. Weak solutions, 2 parts in 100,000, remarkably increase phagocytic energy, whereas solutions fifty times stronger have an opposite effect. Neisser and Guerrini have investigated a whole series of substances that stimulate phagocytic activity, among them being certain solutions of peptones. This question of *stimulines*, inaugurated by us many years ago, and which appeared to be dead and buried, has recently come to the fore again.

The theory of phagocytosis, formulated upwards of a quarter of a century ago, hotly contested on all hands for many years, is now admitted by a large number of authorities in all parts of the world, and it is, so to speak, only to-day that it is beginning to find practical application. We are therefore justified in hoping that the future will reveal more than one

means of bringing phagocytosis to bear in the interest of health.

The subject I have just dealt with may serve to demonstrate the usefulness of purely theoretical research. The study of the digestive organs in lower animals, long since disappeared, has little by little enlarged the scope of investigation, and has culminated in a new conception of immunity, and in the search for methods for combating infection and ensuring the resistance and the recovery of the organism.

## THE DIETETIC DECHLORIDATION CURE IN BRIGHT'S DISEASE. (a)

By F. WIDAL, M.D.,

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[SPECIALLY REPORTED FOR THIS JOURNAL.]

OF mineral substances, the chlorides present most interest to the physician, for, by studying them, he is enabled to appreciate the hydropiginous action of retained chloride of sodium, and the remarkable effect of chloride restriction on the disappearance of oedema.

Since 1902, with the help of Dr. Lemierre, I succeeded in establishing on an irrefutable basis the part taken by chloride of sodium in the pathogenesis of Bright's disease. For the first time we managed to produce oedema, which may be regarded as experimental, in patients suffering from interstitial nephritis, simply by adding three or four drachms of supplementary salt to the diet. It had previously been suggested that the retention of the other saline matters might, like chloride of sodium, determine oedema, but I demonstrated by a long series of researches that of all the soluble substances, chloride of sodium is the only one which need occupy the mind of the physician in connection with renal oedema. I showed, in particular, that urea, which is so often retained in Bright's disease, accumulates more particularly in the blood, and in the course of our investigations we have never been able to convince ourselves that retained urea exerted the slightest hydropiginous action. The question may indeed be regarded as settled. As Dr. Von Koranyi remarks, "the unquestionable part played by chloride of sodium, and the negative influence of the products of nitrogenous disassimilation, are facts of capital importance, though in opposition to my earlier impressions."

Indispensable to organic life, chloride of sodium acts as a compensatory agent for molecular deficiencies, it is composed of molecules which are able to pass through the membranes of the body in any direction, and the vessel walls need not be damaged for it to escape therefrom.

Dr. Strauss found that in some subjects of Bright's disease the oedema disappeared when polyuria and polychloruria were induced, and this led him to prescribe diuretics, and to reduce the quantity of alimentary salt, he specially insisted on milk diet as a means to this end. Just at that time, Dr. Javal and I published the earliest results of our researches on the dechlorination cure, mentioning the case of a renal subject in whom, on several occasions, we had been able to determine the appearance and subsidence of oedema by varying the quantity of ingested chloride of sodium. We showed that in patients with chloride retention even milk may be too rich in chlorides, and it seemed desirable, as we pointed out, to try to substitute a more generous, more agreeable, and altogether more efficacious diet for the milk. We showed it to be possible in many instances to dis-

card milk in favour of a diet less rich in chloride, and we arrived at the rather startling conclusion that a diet largely composed of meat and other solids hitherto regarded as highly unsuitable for renal patients might prove far more beneficial than milk, provided such food be taken without salt; moreover, that the addition of half an ounce of salt sufficed to render such a diet actively injurious.

We must not forget that under certain conditions alone milk will suffice to maintain nutrition and dechlorination for a time, but to order milk with a free hand for a renal patient is to expose him to the risk of taking a diet too liquid and too rich in chlorides, one, too, which contains an abundance of albumen. The amount of milk required to provide a maintenance *regimen* contains four times more chloride than a saltless mixed diet answering the same purpose; it contains six pints of water, and not less than four ounces of albumen, that is to say, more than many renal patients can tolerate.

We established the fact that not only is a saltless diet able to check the further progress of renal oedema, but that it will even cause it to retrocede. Thereupon we proceeded to ascertain the indications for this cure, to define its application, and to establish the composition of the dietary to be compiled with this object in view.

Hydration of the tissues takes place in two stages: first there is infiltration of the deeper tissues, not appreciable to sight or touch, constituting the *præ-oedema* stage, followed sooner or later by outward and visible subcutaneous oedema. The existence of the former can only be ascertained by the aid of the scales, and in practice renal patients should always be weighed at stated intervals. The invisible oedema, revealed only by the weighing machine, involves the viscera, and may pave the way to a group of visceral disturbances, formerly known collectively as *uræmia*, but which are in reality due to chloruræmia, a term that signifies chloride retention in the organism, but not necessarily in the blood. Visceral chloruræmia may give rise to various troubles referable to the stomach, intestine, nerve centres, and even the kidneys.

Albuminuria, which in some subjects of parenchymatous nephritis increases or diminishes according to the degree of chloride retention, is, in our opinion, due to the oedema which, in this instance, is situated in the kidney.

The kidney is never absolutely impermeable to chloride. The degree of impermeability varies within wide limits; indeed, it varies in the same subject at different stages of the disease. In many cases renal permeability is still such as to allow of the moderate use of salt with food, but in other instances the kidneys offer such an obstacle to the passage of chlorides that it is necessary to push the withdrawal of salt to its ultimate limits.

The dechlorination cure comprises two indications: to rid the organism of the salt and oedema which encumber it; then to formulate a dietary, the richness of which in chlorides is in proportion with the degree of the renal impermeability to salt of the patient.

When, therefore, we are called to a patient with renal oedema, the first thing to be done is to place him on a strictly saltless diet. We must watch the case, keeping a chart of the weighings, and methodically ascertaining the chloride balance, and in this way we shall be enabled to establish the limit of toleration with approximate accuracy—a limit which we must studiously avoid reaching in the diet.

(a) Abstract of Paper read at the Twenty-Sixth German Medical Congress.



It is easy enough to ascertain the quantity of salt ingested. If the patient is on milk diet we know that milk contains 12 grains of chloride to the pint, if he be on mixed diet we may calculate that he is taking about 25 grains of natural chlorides, and this may, by appropriate selection, be reduced to 15 grains a day.

Everyone who has had any experience of the dechloridation treatment is aware of the readiness with which in some patients oedema subsides under its influence. But this is not invariably the case, and the treatment may present difficulties. Each patient has his own formula of chloridation and dechloridation, and this the physician must seek to grasp in order to obtain the best results. In some cases dehydration takes place but slowly, and it may be hastened by the administration of diuretics.

As soon as dehydration is complete, and the weight remains stationary for several days, we may cautiously proceed to try the patient's limit of permeability—*i.e.*, to what extent we may venture to enrich his food with chloride.

The dechloridation cure, after all, is only the treatment of a syndrome—*viz.*, chloride retention. It does not enable us to combat all the troubles to which nephritis exposes the patient, least of all those due to nitrogenous retention. Chloride of sodium and urea are not the only substances held back by the diseased kidney, though they are no doubt the most important, and in any case they are the ones we know most about in connection with Bright's disease.

In one category of cases the renal insufficiency bears on the products of nitrogenous disassimilation, while in another it takes the form of chloride retention; in other words, there are two types of cases, the nitrogenous, as opposed to the chloride, type of renal disease. In such subjects, suffering from this dissociated insufficiency, we are enabled to study the symptoms of each type of retention at our leisure. Usually, however, nitrogen and chloride of sodium are both held back by the kidney, especially as we approach the terminal stages of the disease, but in spite of the difficulty that is often experienced in differentiating the symptoms due to nitrogenous from those due to chloride retention, no diagnosis can be regarded as complete unless it includes the nature and extent of the nitrogenous or chloride disturbances from which the patient is suffering.

Chloride retention and nitrogenous retention differ in their clinical effects to which they respectively give rise, and this difference is dependent upon the process of accumulation peculiar to each. The function of sodium chloride being to maintain the osmotic equilibrium of the humours, it quits the blood and passes into the tissues in order that the blood may remain isotonic with the other organic fluids. Urea is a substance specially adapted for renal elimination, and when its passage through the kidney is hindered it does not, as does sodium chloride, exhibit any tendency to pass back into the tissues, but it accumulates in the blood, and it weighs particularly on the epithelium of the tubuli. The blood becomes surcharged with this substance, and thus we automatically get urea-pressure, under the empire of which the kidney ultimately gets rid of the quantity of urea which it has to excrete.

It will be seen, therefore, that the molecules of urea accumulating in the blood tend in an opposite direction to that followed by the molecules of sodium chloride in accumulating in the tissues. This fact enables us to understand why it is that chloride retention so often culminates in hydropiginous

uræmia, while nitrogenous retention, of whatever degree, determines a *dry* uræmia. In a renal patient who remains purely ureocæmic the disease may run its whole course without the slightest tendency to oedema.

The ureocæmic patient usually displays progressive loss of appetite, which may be regarded as a defensive reaction against excess of food; there may be a mental state varying from torpor to actual coma, but the visceral and nervous disturbances are often very difficult to distinguish from those dependent on chloride retention, especially as the patient may be suffering from both. We have pointed out that in retention of urea it tends to accumulate in the blood, so that the presence of an excess of urea in the serum will afford us the most trustworthy test of urea retention. In patients with marked chloride retention the blood may only contain a comparatively small proportion of urea—say, 2 grains to 4 grains to the pint of serum, and when this is the case we know that we are dealing with chloridæmia. When the blood contains upwards of 8 grains to the pint, we have to reckon with nitrogenous retention, while if the proportion of urea rises to 25 grains or 30 grains to the pint—which is rarely seen except towards the end—the fact justifies the gravest prognosis. All this goes to prove the importance of periodically estimating the proportion of urea in the blood withdrawn by wet cupping or venesection, procedures which are so frequently indicated in the course of Bright's disease.

We are all familiar with the difficulty attending prognosis in uræmic states. One patient, who is the subject of multiple oedema, dyspnœa, vomiting and eclamptic attacks, who, in short, presents symptoms of the utmost gravity, suddenly takes a turn for the better and recovers, while another patient who is simply somnolent or suffering from loss of appetite suddenly develops the terminal coma. Now, in such cases our only guide is the proportion of urea contained in the blood. However extensive the oedema may be, and however grave the symptoms, if the blood only contains a normal quantity of urea, we are dealing with chloride retention, in which all we have to do is to adopt the dechloridation cure with diuretics.

Whenever the symptoms lead us to apprehend nitrogenous retention, the quantity of food must be cut down, and the loss of appetite in such a patient of itself suggests less meat.

Some patients take readily enough to a saltless diet, while others after a time find it intolerable. With regard to the latter, I find that if we allow them 15 grains or 20 grains of salt a day, on the plate, even this small quantity enables them to relish their food after being deprived of it altogether for some time.

The dechloridated diet entails no drawbacks in nephritic subjects, even when persevered with for long periods, since the privation of salt is always relative, not absolute. The organism only parts with very small quantities of its salt, so that a very trifling daily addition suffices to maintain the balance. I have had under observation patients who have gone on for many months on half a drachm of salt a day without the supervention of any disturbances that could fairly be ascribed to salt privation.

The dechloridated *regimen*, while enabling us to get rid of the chlorides in the organism and preventing its retention, enables the physician to apportion the intake of water and the three fundamental substances—*e.g.*, fats, carbohydrates and albumen. The ordinary healthy man may take more alimentary chloride every day of his life without inconvenience, but the renal and cardio-vascular

subject must always keep an eye on his chloride intake, and must always bear in mind the likelihood of accumulating reserves of chloride in his tissues. It follows that, independently of periods of renal insufficiency and asystole, a renal patient should take as little salt as possible with his food, for he never knows at what precise moment the exaggerated ingestion of the chlorides may prove mischievous.

## PROGRESSIVE MEDICINE AND THE OUTLOOK ON TUBERCULOSIS. (a)

By R. W. PHILIP, M.A., MD.,  
F.R.C.P. AND F.R.S.E.,

Physician to the Royal Infirmary, Edinburgh, and to the Royal Hospital for Consumption.

THE lecturer prefaced his instructive address by remarking that no subject in medicine had wider interest, and no assembly could appraise, as that great Association had, its significance and magnitude. They knew its difficulties, and had to face them every day. He was influenced, too, by the fact that the Association met that year in Ireland, where, thanks to the admirable energy of her Excellency the Vicerine and the generous co-operation of the medical profession, a great anti-tuberculosis movement was in progress. Nor could he forget the striking part played by the city of Belfast in times gone by through the remarkable labours and writings of Dr. Henry MacCormac, and in more recent times by those who were yet with us. Proceeding, the speaker gave a retrospect of the general attitude towards consumption thirty-five years ago, from which he asked them to turn and view the bounding, surging movement which had compelled the great march forward. He divided the thirty-five years since into five lesser periods of seven years each, indicating the results of observation and research. To-day the physician and sanitarian had joined hands, and had been aided not a little by thoughtful social workers who recognised the vast part played by tuberculosis as an agent of national devitalisation and impoverishment. The nations of the world were falling into line. Repeated international congresses had borne excellent fruit. With exchange of ideas endeavour had become better directed and more uniform. The significance of organisation and co-ordination of effort was gradually being appreciated. Administrative control was taking practical shape. And so the great work went on. He invited them to pause for a brief hour and think what the discovery of the tubercle bacillus had meant to medicine and to the world, and what it might mean. The determination of the essential cause had called order out of chaos. It had thrown to the winds the vague, nebulous talk of dualism which long perplexed medical science. Tuberculosis, however various its aspects, was one indivisible entity, dependent essentially on the presence and activity of one organism. Behind the changing pathological and clinical appearances the tubercle bacillus remained single and constant. The discovery had taught them to call things by their proper names. In presence of tuberculous infection, mysterious inflammations, formerly named in misleading fashion pneumonia, broncho-pneumonia, pleurisy, and bronchitis, were getting their proper place. They were facing the fact that tuberculosis was vastly more common and infinitely more various in manifestation than they dreamt of in years gone by. They had come to

realise that when tuberculous disease was present in an organ, be it in the lungs or elsewhere, they had to deal with a specific disease the local manifestation of which might be comparatively unimportant compared with the systematic effects. After dealing exhaustively with the questions of diagnosis, prognosis, and treatment, reference was made to tuberculin. Dr. Philip testified to its value and freedom from risk, and referring to the frequent occurrence of tuberculosis in children, quoted statistics to prove that the increase from the first year to the fourteenth rose steadily from 15 per cent. to 70 per cent. These figures were from the city of Vienna. The returns were from post-mortem results, and tuberculin results ranged from 16 per cent. to 68 per cent.; while of 509 consecutive patients in hospital for diphtheria, scarlet fever, and other acute infections, except measles, 271 were positive, that was circa 50 per cent. Tuberculosis was commonly contracted in childhood. The significance of that could scarcely be exaggerated. In answer to the query, Where does the bacillus come from? it was natural and tempting to trace infection in childhood chiefly to infected milk supply. But did the facts bear this out? Tuberculin tests showed that tuberculosis was relatively less common during the first two years—when, if milk were the chief agent, they might expect it to be greater—and evidence of infection became progressively common as age advanced. The facts of comparative ethnology tended also to qualify the view. For tuberculosis flourished abundantly in not a few countries where feeding with milk from cows or other animals appeared unknown. The facts appeared to point conclusively to the relatively airless

### CONDITIONS OF HOME AND SCHOOL LIFE

as a chief ætiological factor. He ventured the suggestion that it was to the extensive distribution of tuberculosis in childhood that they must trace the frequency of the graver symptoms and complications which occurred in such infections as measles and whooping-cough. Statistics testified to the tremendous grip which tuberculosis had obtained on the race and its immense ramifications throughout the social organisation. They emphasised the significance of measures directed to the better sanitation of dwellings and schools as well as workshops and offices. They illuminated and illustrated the housing question—using the phrase in the widest sense—as nothing else could do. No less did they accentuate the great need which existed for an organised and co-ordinated plan of operations in relation to tuberculosis as it occurred in our social communities. With so great a mass of tuberculous material to handle they could not afford merely to wait and treat individual patients as they happened to present themselves at outpatient departments. They must search for them in their hiding places. They must track them to their breeding-grounds. The lecturer next emphasised the need for concerted action, justifying notification and the establishment of the consumption dispensary as a central institution. The State and various administrative bodies should recognise that tuberculosis was a social evil. Ireland, thanks largely to the attitude adopted by her Local Government Board, was in possession of a Tuberculosis Prevention Act which became effective on the first of the present month, and which gave her potentially the entire machinery for a complete and effectual campaign. He invited them to consider briefly two aspects of treatment. The first of these had no direct relationship with the tubercle bacillus—namely, aërotherapy. The second depended essen-

(a) Abstract of the Address in Medicine delivered at Belfast before the British Medical Association, Wednesday, July 28th, 1909.

tially on the bacillus—was, indeed, the outcome of our growing acquaintance with that and other organisms. He referred to tuberculin and vaccine-therapy. His thoughts turned in that direction because of Belfast, and because of Henry MacCormac, and because of the misunderstanding which still lingered round the great truth he sought to establish, with the result that what ought to be a mighty bearing column was still lightly discussed as almost of doubtful purpose in the edifice. Facts and statistics had speedily accumulated which went to show that tuberculosis resulted chiefly from the exclusion or insufficient supply of fresh air in the dwelling-room, workroom, and other haunts of man; and, further, that in proportion as the supply of air and sunlight was improved, under better conditions of sanitation, there followed a corresponding reduction in the mortality from tuberculosis. Not only this, but there was abundant evidence that open-air treatment was successful in proportion as it was carried out completely, in winter no less than in summer. Indeed, there was not wanting support for the belief that the results obtained under open-air treatment was fully better during the colder than the warmer months of the year. *Aërotherapy* was a measure of universal applicability in all lands. There was no climate specially favourable for its practice. It might be doubted whether any climate, taken as a whole, was more suitable for the purpose than that of the United Kingdom. Again, *aërotherapy* was of universal applicability in every sick-room. It was not a special system to be practised in special institutions. It was utilisable in the bedroom of the ordinary dwelling as certainly as it was in the ward of a special hospital. *Aërotherapy* while specially indicated in tuberculosis, was a measure of widest applicability in relation to disease. It was a mighty principle of treatment both from the curative and from the preventive point of view. They were only awakening to the full significance of that great cleansing, antidotal, and vitalising principle whose applicability in medicine was no less far-reaching than that of asepsis in surgery. It was to the everlasting credit of Henry MacCormac that he had a clear prevision of so much of this, and had the courage and determination to state his belief in no uncertain way, notwithstanding captious criticism and even ridicule. A few sentences quoted from different pages of his work on consumption would illustrate sufficiently his width of view. From start to finish the volume contained pregnant statements of remarkably striking character, as, for instance:—"Tubercle is simple impossible in the case of persons who respire habitually air not prerespired, and who sleep in an atmosphere incessantly renewed. . . . Pure respiration is the law of life, impure respiration is the law of death. . . . It was once a general prepossession that taking cold, that damp night air, forsooth, was a source—the source, indeed—of consumption, but this is a great error. The coldest, dampest air does not, never did since the world began, and never will, induce consumption. . . . If a person will but occupy three or four hours daily with active open-air life and effort, and sleep in a chamber the windows of which shall be pulled down winter and summer the night through, he may bid defiance to consumption and scrofula for ever and ever. So all-important is the respiration of a pure unprebreathed atmosphere all night long, that I should freely stake the prospect of health upon its observance alone, before and beyond any and every other means, which omitted this most desirable and, indeed, indispensable requirement. . . . If the inhabitants of Great

Britain and Ireland would but consent day and night to live in a pure, unprebreathed atmosphere, it would put a total close to the ravages of consumption and scrofula, white swelling, tabes mesenterica, water on the brain—in fine, the whole abhorred family of tuberculous disease." Then, in relation to the bearings of climate, how modern he was:—"There is, in fact, no panacea in Californian air, no peculiar specific for lung troubles. If we cannot have the summer of California or the winter of sunny Mexico, we possess not the less a climate, whatever some may choose to say against it, replete with almost every possible element of vitality and well-being. We have air as pure as any obtainable on Californian or Mexican hills, air abounding in oxygen and ozone, air, in short, which, if we do not respire it twice, leads to as perfect security from tubercular disease here as there. . . . The shores, almost any of them, of our islands, our mountain slopes and airy downs, our many heaths and moors, will often, if not most times, prove preferable to, while they are much more accessible than is, any Nice, or Rome, or Madeira. The materials for the possible recovery from phthisis, I repeat, lie around every door." Those were remarkable words—the sayings of a seer, the writings of a prophet. Reading them to-day, he could not refrain from congratulating Belfast and reverently saluting Henry MacCormac. Having dealt with vaccine-therapy, Dr. Philip asked what of the larger future? Might they look forward with confidence to the time when tuberculosis should cease to be? He thought they might. Everything pointed to its early and final disappearance. That should not be impossible of achievement within a generation or two among the nations which regarded the public health as an integral part of civilisation. Was not tuberculosis chiefly the expression of partial, ill-informed civilisation? It was introduced by ignorant, unthinking mankind, and mankind, educated and thinking, could expel it. In the wider sense the principles of anti-tuberculosis warfare were clear enough. The chief difficulty lay in their practical application—especially their engraftment on the older *régime*. In conclusion, the speaker dwelt on the need for proper housing, wide streets, open spaces; and what applied to the towns applied no less to country districts. The ravages of tuberculosis constitute

#### A BLOT ON OUR CIVILISATION.

It is time that they inaugurated a policy commensurate with the evil and worthy of the age. It was time that they grasped the larger conception of tuberculosis as not merely the cause of an overwhelming mortality and infinite distress, physical and economic, but also a great devitaliser of the race, indirectly responsible for an incalculable amount of other disease. So soon as that was realised, and also that the agencies which conditioned its occurrence were as certainly removable as those which led to typhus, they should act effectually. Never were the causes of a disease so definitely ascertained. What was chiefly needed was the awakening of the educated intelligence of the nation and the belief that the end was attainable. When that had been achieved, the offices of the doctor would be placed on a higher plane. Instead of being asked merely to tinker up diseased frames, he would be recognised as a nurseryman in the garden of health. Was it too optimistic to anticipate the time when the physician should have restored to him his proper *métier* of physical "educator"—in the largest sense—and guardian of the national health?

## OUT-PATIENT'S ROOM.

### PADDINGTON GREEN CHILDREN'S HOSPITAL.

#### *Fracture of the Lower End of the Humerus.*

By ARTHUR EDMUNDS, M.S., F.R.C.S.

AMONGST the out-patients was a girl, *æt.* 7, who complained that she had fallen downstairs and hurt her elbow. On examination it was found that the point of the elbow was carried backwards and inwards. There was a considerable amount of swelling and pain, but there were no symptoms of pressure on any important vessels or nerves. A skiagram showed that there was a separation of the epiphysis on the outer half of the bone joining a fracture through the diaphysis extending upwards and inwards. Mr. Edmunds said there were several points in connection with separation of the epiphysis. In the first place, a pure epiphyseal separation is very rare, especially in this situation, the line of separation usually extending into the bone on the shaft side; indeed, even in cases which would be called true epiphyseal separation, the line of cleavage is between the epiphyseal cartilage and the shaft, and it is very rare to find the cartilage without a few small spicules of bone adhering to it. In the second place, the epiphysis itself is also occasionally broken. The most interesting point is, of course, the one of treatment. Generally speaking, this is satisfactory, although it may be a considerable time before the full movements of the limb are restored. The question that always presents itself is whether the fracture should be operated on or not. The complex character of the articular surfaces of the elbow demand that reduction of any fracture should be extremely accurate, as otherwise movement of the joint is greatly restricted. In young children, however, it must be remembered that the lower fragments are extremely friable, and any attempt at wiring may be impracticable, the fragments being too small and too soft to hold. In adults, on the other hand, wiring often yields the most satisfactory results. In the present case it was decided to take the child into hospital, and to attempt reduction without an open operation, and, in the event of this failing, to cut down upon the joint, for, although the fragments might be too small to wire them in position, it might yet be possible to reduce the deformity and to maintain the fragments in a good position by appropriate splinting.

The child, after admission, was *anæsthetised*, and, by extending the limb and making slight traction, it was possible to bring the lower end of the humerus into line with the shaft. By acutely flexing the limb and pushing the lower fragment outwards, quite a good position seemed to be obtained. A bent posterior splint of poroplastic felt was applied, supplemented by a triangular piece of wood on its inner side so as to prevent the lower fragment slipping inwards. The arm was then fastened to the child's thorax, with the hand touching the opposite clavicle. This was left undisturbed for ten days, and the child, who had meanwhile left the hospital, was brought to the out-patients' department for further treatment directed towards the prevention of a stiff joint. Impairment of movement in the cases, Mr. Edmunds said, may be due to one of three causes: first, imperfect apposition of the bones, so that they impinge on each other in attempts to move the joint; this, of course, is incurable by any means short of re-setting the fracture or excising the projecting portions of bone; secondly, adhesions, either between the joint surfaces or in the inter-muscular plane; this can be overcome by early massage and movements; thirdly, the formation of callus; this, he thought, was important, because in injuries about the elbow-joint, no matter how carefully the fragments are brought into apposition, this will form and give rise to a limitation of movement which will only disappear as the callus absorbs, and it is useless to attempt to overcome the resistance of the callus. In the present case movement under an *anæsthetic* was carefully carried out two or three times a week, until, at the end of the third week, the child was encouraged to move her arm for herself, care being taken, until the splints were removed, to keep the arm acutely flexed. The lower end of the humerus bears

two fossæ, Mr. Edmunds pointed out, one to receive the olecranon and one the coronoid process; if the arm be put up flexed, the olecranon fossa becomes fixed with callus, and extension is limited; if the arm be put up extended, the coronoid fossa is filled up and flexion is limited. Full extension is not a common position of the arm, and loss of a few degrees of extension is of no practical importance; if, however, the arm cannot be flexed more than to a right angle, its usefulness is greatly impaired. For this reason, apart from any considerations of the best method of keeping the fragments in position, these fractures should be put up flexed, and in practice it is found that an arm with 90° of movement at the elbow-joint, the extreme extension being an angle of 135° and the extreme flexion an angle of 45°, is a very useful limb, and a child can be trusted to use it, and hence restore rapidly full mobility.

## OPERATING THEATRES.

### ST. MARK'S HOSPITAL FOR DISEASES OF THE RECTUM.

TWO CASES OF PARA-SACRAL EXCISION OF THE RECTUM, ILLUSTRATING THE DIFFERENCE IN THE TREATMENT OF THE PROXIMAL END OF THE BOWEL.—MR. SWINFORD EDWARDS operated on a man, *æt.* 38, who had suffered with symptoms of rectal mischief for about six months. Examination revealed a typical malignant adenoma lying in the front part of the rectum; the lower border reached to within half-an-inch of the anal canal; the circumference of the growth was about equal in size to that of a five-shilling piece; it was movable, and a digital examination could detect no enlarged sacral glands. It was, therefore, Mr. Edwards considered, a favourable case for excision. The patient having been *anæsthetised* and turned into the left lateral decubitus, the pelvis being somewhat raised by a small, hard cushion placed under the left hip, a central median incision was made from about the middle of the sacrum to within an inch of the anus; this exposed the lower part of the sacrum and coccyx, which bones were then freed by lateral dissection, cutting through a few fibres on either side of the gluteus maximus. The tip and sides of the coccyx were now freed from the peri-rectal tissues by blunt, curved scissors. The freeing of the anterior surface of this bone and of the lower portion of the sacrum was completed by stripping off the soft parts by means of the finger, covered with gauze. The sacrum was divided by mallet and chisel about three-quarters of an inch above the sacro-coccygeal articulation, and the portion of bone removed after dividing the lower part of the great sacro-sciatic ligaments on either side by means of the rib shear. After ligation of a couple of the anterior sacral vessels, the incision over the rectum was deepened in its lower part by division of the fibres of the levator ani. Blunt dissection with the finger on either side of the rectum enabled the operator to reach the peritoneum, which was at once opened, and a fold of gauze passed from side to side, thus allowing the rectum to be pulled partly out of the wound. A couple of intestinal clamps were now placed on the bowel, and the fold of gauze removed. The rectum was next divided transversely between the two clamps, and the mucous membrane of the two ends thoroughly disinfected by swabbing with strong carbolic acid. The upper end of the bowel, together with the retaining clamp, was now turned upwards out of the way, and the lower end freed by further dissection from the base of the bladder and the prostate down to the level of the internal sphincter, and excised transversely. In this way a section of the rectum about 3 in. long, including the neoplasm, was removed. As the lower portion of the bowel left was too short to carry out a satisfactory rectorrhaphy, and also on account of the difference in the lumen of the upper and lower segments, the operator decided to remove the mucous membrane of the lower segment after forcible dilata-

tion of the sphincters, and, after further freeing the proximal end, to pull this down through the muscular coat of the lower segment and unite it to the anal margin. Accordingly, by a little extra dissection and slitting up the peritoneum on either side, the upper portion was rendered sufficiently loose to be brought down to the anal margin without undue tension. The opening in the peritoneum was now closed by fine continuous silk sutures. Mr. Edwards then turned his attention to the removal of the mucous membrane of the distal segment, which in this position of the patient presented some slight difficulty, but, this having been done, the proximal end was drawn down through the sphincters and sutured to the skin around the anus by interrupted silkworm gut sutures. The divided levatores ani were next sutured with fine silk, and the posterior wound closed, allowing only room for two rubber drainage tubes.

The second patient was a woman, æt. about 50, who was troubled in much the same way, having an adenocarcinoma of about the same size situated on the antero-lateral wall, but not extending so low down—in fact, in this case there was about an inch between the lower border of the growth and the upper border of the anal canal. Mr. Edwards followed the same steps as in the previous operation until dealing with the upper and lower ends of the bowel, which he united, after having closed the peritoneal cavity by through-and-through sutures of fine silk, supplemented by a series of Lembert's sutures.

Mr. Edwards said that, before comparing these two cases, it would be noticed that, in operating on the first one, he met with some difficulty in removing accurately the mucous membrane of the lower segment, owing to the position in which the patient was placed. He said that in the future, for carrying out a like operation, he would, in commencing operative interference, place the patient in the lithotomy position, when it would be a comparatively easy matter to remove the mucous membrane from the lower two or three inches of the bowel, as is done in Whitehead's operation for piles. This would be in cases where it was possible to preserve the sphincters. The patient would then be turned on the side and the operation proceeded with in the manner he had just employed. In comparing these two operations it would, he said, be noticed that by the first method all fouling of the wound by the motions was avoided during convalescence, but sloughing of some portion of the lower end of the bowel is apt to take place owing either to tension or to some interference with the blood supply in thoroughly freeing the bowel in its upper part. In the second operation, although the bowel invariably gives way behind, thereby forming for a shorter or longer period a fæcal fistula, this usually heals without any plastic operation, and it has the advantage that, during the operation, the upper segment does not require to be freed so extensively, and therefore risk of sloughing is not so great, and the operation is not so prolonged. He is therefore in favour of rectorrhaphy being carried out where the growth allows of retention of a sufficiently long lower segment.

Both cases followed the normal course. In the first the bowel did not hold in its entire circumference, some of the stitches cutting out, but this made but little difference to the patient, who had no difficulty whatever in passing his motions through the new anus. The dorsal wound healed rapidly, and he left the hospital after a month, being advised to present himself weekly for the passage of a bougie, as there was some tendency to stenosis about one inch up, where the bowel had partly sloughed. In the other case, the rectorrhaphy broke down in the posterior part of the bowel, and for a couple of weeks the greater part of the motions passed out through the wound; but this rapidly improved, and when she left the hospital five weeks after the operation, all the fæces passed through the normal anus, whilst the dorsal wound was healing satisfactorily—in fact, its complete healing might be expected well within another month. In this case, again, it was found necessary to pass a curved metal bougie every other day in order to treat the spur which always, as pointed out by Mr. Edwards, forms anteriorly at the site of the junction of the upper and lower segments.

## CORRESPONDENCE.

### FROM OUR SPECIAL CORRESPONDENTS ABROAD.

#### GERMANY.

Berlin, August 1st, 1909.

At the Verein für Innere Medizin, Hr. H. Senator introduced the subject of

#### "AIRPEARL" BATHS.

He first spoke of the action of carbonic acid baths, the beneficial effects of which were due, according to the Senator-Frankenhäuser theory, to a thermic contrast, carbonic acid being a worse conductor of heat than water. The point of indifference—that was, the point at which neither heat nor cold was experienced—was 35° C. in ordinary water, and 24° in water saturated with carbonic acid. In a carbonic acid bath, as was well known, the acid settled on the whole surface of the body in countless numbers of minute globules, and it was between the parts of skin occupied by the globules, and not under the globules themselves, that the thermic contrast was felt. Oxygen added to a bath acted in a similar manner, but to a lesser degree. Atmospheric air possessed properties similar to those of oxygen, and it was now made use of for baths. The pump that drove the air into the water was driven by water-power. As regarded the action of the baths, the CO<sub>2</sub> baths raised the blood pressure, lowered the pulse rate (?), and acted as a stimulant. The airpearl baths, on the contrary, lowered both blood pressure and pulse rate, and acted as calmatives. Oxygen baths had a similar effect. According to recent researches, CO<sub>2</sub> was resorbed through the skin, and some of it resting on the surface of the bath was inspired. Probably the same thing took place in the O baths, but no definite conclusions had been arrived at on the subject. The CO<sub>2</sub> bubbles had a more stimulating effect on the skin than the air bubbles. There was no essential difference between the O baths and the airpearl baths.

Therapeutically, airpearl baths were indicated when a calmative effect was desired, and when a lowering of the blood pressure was called for, as in arteriosclerosis.

Hr. Laqueur remarked that, from investigations made in v. Noorden's wards in Vienna, no absorption of O took place from O baths.

Hr. Gudzent communicated some notes on the behaviour of

#### URIC ACID AND ITS SALTS IN BLOOD SERUM.

He remarked, first, that His and Paul had recently again taken up the study of uric acid and its salts. There were three questions awaiting answers: (1) The solubility of uric acid in the blood; (2) their combinations in the blood; (3) the cause of the precipitation of urates. Previous representations on these points had been erroneous; the speaker's own investigations had led to widely different conclusions. Uric acid was a very weak acid, and it was worth while to learn its behaviour in mixtures resembling blood serum. It was to be advanced as a preliminary that uric acid, according to its strength, entered into conflict with other acids of the blood for possession of their bases. This conflict had no outlook as far as the stronger acids were concerned; their bases could not be detached from the far stronger acids, hydrochloric and phosphoric. It was different with CO<sub>2</sub>, which was a weaker acid than uric acid, the latter taking from the former 95 per cent. of its sodium. It then formed a sodium salt, a monosodium urate. There were in natural blood serum still unknown bodies that might influence chemical processes; a monosodium urate would here be formed. According to his experiments, uric acid entered into no other combinations, not even with colloidal substances.

In regard to pathology, there were two questions to be answered: (1) How did uric acid behave in pathological conditions? and (2) how was the behaviour of the monosodium urate in the tissues to be explained? Regarding Question 1, he would say that if the monosodium urate was not quickly expelled from the blood, if there was any hindrance to its departure, from

being in a soluble condition it might become insoluble. This was the case in gout. If, then, there were more salts in the fluid than were in solution, if the fluid was over-saturated, the salt was precipitated. According to his investigations, the blood serum was over-saturated with the monosodium urate in cases of gout. The purin-weak diet ordered for the gouty was therefore justified. In cases of damaged kidney, with its retarded excretion, the blood serum was very easily overloaded with uric acid.

As regarded the preference shown for some joints where the deposit of uric acid was concerned, this must be due to irritation after trauma. The preference of cartilage as a place of deposit was due to the fact that the cartilage was the tissue that was the richest in sodium. The assumption of Brugsch that there was a special affinity of the cartilage for uric acid was incorrect.

The speaker had found radium emanations a means of preventing the conversion of monosodium urate into an insoluble form; the salt became more soluble under their influence. It would be the work of the klinik to study the influence of the emanations on the patients themselves.

In reply to various speakers, Hr. Gudzent said that he had purposely refrained from drawing far-reaching conclusions; he had only stated the results of his inquiries; no hypotheses had been proved, but they might well stimulate to further investigations.

### AUSTRIA.

Vienna, August 1st, 1909.

#### POLIOMYELITIS.

At the Gesellschaft für Innere Medizin, Marburg presented a child from Hamburger's ward who had fallen on its arm and produced poliomyelitis. After the fall all the extremities were affected, the legs with a spastic form, the arm relaxed and powerless. The spastic form soon disappeared after admission, but the arms remained paralysed. The electric current was negative, or greatly reduced, while the reflex was increased. The sensibility was generally reduced, but in the arms it was normal. Along with this condition there was ptosis and mydriasis.

Zapparet asked if he had eliminated the possibility of a blood clot in the spinal cord. Marburg replied that the sensibility would have been greatly increased if this had been present, whereas, on the contrary, it was reduced and only normal in the arms.

Neurath remarked we often meet with poliomyelitis in the arms when a part of the pyramidal is interfered with. With this we get an increase of the deeper reflex in the lower extremities, or a positive Babinski phenomenon.

#### LUPUS AND MEASLES.

Pollak presented a little girl with disseminated acute lupus, which appeared after an attack of measles. The efflorescence reminded one of papular necrotic tubercles, although no symptom of tubercle was present. These acute lupoid patches appear to have been excited by the morbilli poison.

Nobl remarked that imperfect yellow patches could be seen on the trunk under the skin, which he thought had every appearance of tubercular infiltration, which would finally produce atrophy of the skin.

#### OBLITERATION OF DUCTUS CHOLEDOCHUS.

Goldreich exhibited a preparation taken from a child showing the total obliteration of the gall-duct, which appears to have been congenital. From birth the child was icteric, and the stools acholic. Later it was seized with panophthalmitis and sepsis, from which it died in the seventh month.

The post-mortem showed that the ductus choledochus and ductus hepaticus were quite obliterated.

#### SANATORIA FOR TUBERCULOSIS.

Escherich next introduced the subject of curing tuberculosis by sanatoria situated at great heights. The town of Leysin, in the northern region of the "Rhonetales," was 1,300 metres above the level of the sea, where a colony of tubercular invalids rapidly improved. The aspect was southern, well-protected by hills, the air being 40 to 50 C. in the summer and 20 to 30 in the winter. The sun was intense and cloudless. During eight months of the year

the surroundings are covered with snow, the temperature below freezing-point, while the thermometer in the sun is 30° C. This radiation is of great value in surgical cases, of which there have been 500 treated this year. Open wounds and tubercular fistulæ rapidly heal when exposed to the sun's rays, necrotic tissue becoming mummified and fistular ulcers healing up in a short time, while the whole surface becomes deeply pigmented as a favourable prognostication of future recovery.

Monti gave a historical review of his experience of heliotherapy during his residence in Leysin. It was while on a visit to the Engadine, and seeing the happy results of Bernhard, that the happy idea of establishing a surgical sanatorium at a high altitude, where tubercular wounds could be treated was first suggested. Rollier fixed on Leysin as a suitable situation, which has been justified by the results obtained in his klinik. The wound is left exposed to the sun, and the patient left in the open air. He then showed a few photographs of old tubercular sores that would not heal in Vienna, but with these sun baths at a high altitude the wounds and fistulæ had quite dried up. Rollier has 80 per cent. of these cases cured in six to eight months.

#### RIGA DISEASE.

Kantz showed a child, nine months old at the breast, who was brought to the ambulatorium a few days previous with a history of a swelling having commenced under the tongue 14 days before seeking admission. The child had always been healthy, and cut its first teeth when six months old.

In the frænulum linguæ was a large, clear swelling covered with a fungus. Around the base a red greyish annulus, hard and resisting, was present.

According to many authors from whom he quoted, this was a fibroma sublinguate, or what has recently become known as Riga disease, being very common in that district.

Pollak thought these fibroma arose from the irritation of the cutting of the incisors and feeding at the breast. The therapy in these cases is patience, as it may go back itself, but, if removed, will recur.

## SPECIAL REPORTS.

### THE SEVENTY-SEVENTH ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION AT BELFAST.

JULY 23RD TO 30TH.

[FROM OUR SPECIAL CORRESPONDENT.]

THE Seventy-Seventh Annual Meeting of the British Medical Association has come and gone, and has been a marked success. The numbers have been far higher than was expected, and strained local accommodation to the utmost, but happily not to breaking point. At the last meeting, twenty-five years ago, 563 members registered, and at this the numbers ran up to about one thousand. The addresses and sectional proceedings have attained a high level of scientific value, and the social functions, both public and private, have been planned and carried out on a generous scale, which has maintained the best traditions of Irish hospitality. Undoubtedly, the presence of Their Excellencies the Lord Lieutenant and the Countess of Aberdeen did much to add to the interest of the meetings, for they not only attended as many of the social gatherings and entertainments as could be crowded into each day, but they also attended the President's address, the other addresses, and a number of the sectional meetings. His Excellency was already an honorary member, having been made one at the Montreal meeting in 1897, and at a general meeting of the Association held in Belfast on Thursday last, Her Excellency was enrolled as the first honorary woman member, an honour which no doubt she appreciates both as an enthusiastic worker in the cause of national health, and as a strong supporter of the claims of her sex for a recognised position in public affairs.



During the previous Saturday and Monday, the representative meeting had got through a large amount of useful work, chiefly of a medico-political character, which was carried on in private. Then on Tuesday, 27th, the regular business of the meeting began. The President-elect, Sir William Whitla, entertained the members of the Council and many prominent visitors at luncheon in the Medical Institute, where there was a brief preliminary canter in speech-making. On the same afternoon, Dr. Sinclair White, the President, handed over the reins of office to his successor, and feeling reference was made to the loss sustained by the Association through the death of the Sheffield president, Mr. Simeon Snell.

#### THE PRESIDENTIAL ADDRESS.

On Tuesday evening Sir William Whitla delivered his Inaugural Address in the Assembly Hall, and on all sides it was agreed that no more brilliant ceremony had ever been carried out under the auspices of the Association. The beautiful hall was filled, the balconies by the general public, and the ground floor by the members of the Association, the majority in academic costume, providing a riot of colour beside which a poppy bed would look dull. The waiting audience was soothed by an organ recital on the grand organ by a member, Dr. Haydn Mulholland, Mus. Bac.; then, when the occupants of the platform took their places, Dr. Dempsey, the President of the Ulster Branch, in an admirable little speech, presented the badge of office to Sir William Whitla from the local members.

The foreign and American guests and the colonial delegates were then introduced to the President by the Honorary Secretary of the Executive Committee, Dr. Cecil Shaw, and were in turn introduced by the President to His Excellency the Lord Lieutenant.

The President then proceeded to deliver his Inaugural Address, in which he welcomed the Association to Belfast, and referred to the striking growth of the town since the last meeting, then dealt with the question of medical education and the history of the Belfast Medical School. The early teachers of the school were named, and a special tribute paid to the memory of Henry MacCormac, who, he said, was not a prophet, but a seer, in the matter of the cause and prevention of tuberculosis. The present position and the future prospects of the school were described, and the great clinical advantages which it enjoys were mentioned, and some of the probable changes brought about by the establishment of the new University were discussed. The Address, which was both able and eloquent, was listened to with marked attention by the great audience. At its conclusion a vote of thanks was moved by his Excellency the Lord Lieutenant, and seconded by Sir Clifford Allbutt, K.C.B.

#### WORK OF THE SECTIONS.

On Wednesday morning the regular work of the Sections began, and was continued on Thursday and Friday. The general impression seems to be that the sectional work was excellent and extremely satisfactory, and the attendance was capital. No discussion languished, and most of them were very lively. The three addresses were much better attended than usual, that on "Progressive Medicine" on Wednesday being by Dr. R. W. Philip, of Edinburgh; that on "Surgery" on Thursday being by Mr. A. E. Barker, of London; and that on "Obstetrics" on Friday being by Sir John Byers.

Among the discussions which attracted most attention were those in the Dermatology Section by Dr. Wickham, of Paris, on "The Uses of Radium in Skin Disease"; Sir Almoth Wright's address at the opening of the Hæmatology Section; the discussion on "Compulsory Notification of Tuberculosis" in the Public Health Section; those on "Angina Pectoris and Athletics" in the Medical Section; and on "The Treatment of Tubercular Joints" in the Surgical Section, opened by Sir Wm. Macewen, F.R.S.

#### THE ENTERTAINMENTS

went off exceedingly well, and seemed to be thoroughly enjoyed by the visitors. The Royal Victoria, the Mater, and the Forster Green Hospitals each gave an afternoon "At Home," and all were crowded. The Presi-

dent and Lady Whitla gave a garden party on Wednesday to the whole Association. The

#### ANNUAL DINNER

was held on Wednesday evening, and was a great success, about 350 members and guests attending it. The speeches, of course, were good. His Excellency the Lord Lieutenant replied graciously to the toast of his health. The Bishop of Down, in most happy terms, proposed "The Association," to which Dr. J. A. Macdonald replied. Mr. Kirk presented the Golf Cup from the Ulster Medical Society, over which he presides. "Our Guests" was proposed by Sir Peter O'Connell, and responded to by the Lord Mayor, Dr. Fehling (of Strassburg), and Dr. Delavan (of New York). Sir Clifford Allbutt proposed "The President," and he in turn proposed the health of the Honorary Secretary of the Executive Committee, Dr. Cecil Shaw.

The same evening a

#### LADIES' RECEPTION

was given in the Opera House, at which Her Excellency the Countess of Aberdeen welcomed the ladies to Ireland, and the Ulster Literary Theatre performed two folk plays.

#### OTHER HOSPITALITIES.

The Lord Mayor's brilliant reception in the Town Hall on Thursday night, and the Ulster Branch Reception in the Botanic Gardens on Friday, were also among the gaieties of the week, as well as numerous minor functions, with abundant private hospitality to fill in gaps in the proceedings.

There seems to be some doubt about the place of meeting next year, and perhaps the best criticism of the meeting just over was supplied by one English visitor, who suggested, "We'll come back to Belfast!"

#### THE SECTIONS.

##### Medicine.

The first discussion in the Medical Section was opened by Dr. Tyrell Brookes (Oxford) on "The Medical Aspects of Athleticism." He dealt with athletics at school and university, considering what amount of medical supervision was necessary or advisable, as well as practicable; the dangers of athletics during convalescence; the moral aspects of athletics, and their influence on the future development of the race. He was followed by Dr. Clement Dukes (Rugby) who referred to the Greek ideal of a perfectly developed mind in a perfectly developed body, which, he said, could only be attained by exercise. Athleticism was the "intemperance" of physical exercise in the not fully developed body, and physical examination and medical direction were alike necessary to avoid this. He quoted the rules in force at Rugby, recommending them as good working rules.

Sir Clifford Allbutt said that that they were deeply indebted for years past to Dr. Clement Dukes for his teaching on school athletics—a debt much increased by that day's paper. He, for his part, was content to be Dr. Dukes' disciple in regard to school athletics. One point he wished to emphasise from his own experience, which was chiefly with young adults at the University, and that was that the influence of infectious disease, in which he would include severe colds, was an element of supreme importance. If sharp exercise were taken by boys or undergraduates shortly after an infection the heart was very liable to suffer, and he was disposed to think that in all cases of enlargement of the heart after exercise in young people, an infection had preceded the physical stress.

The Provost of Trinity College (Dr. Traill) said that he was still a vigorous athlete at 71, and speaking as a tutor of 32 years' experience, he could say something of the moral aspects of athletics, the physical and mental effect of which was the banishment of morbid desire.

Sir James Barr (Liverpool) read a paper on "The Medical Aspects of Athleticism," in which he urged the advantages of physical training in the future development of the race. He believed in the improvement of physique as a substratum for mental development. He recommended hazardous and active games for young men, reserving golf, bowls, and curling for elderly gentlemen.

Regarding the formation of character it was important to notice that it was only the last three games which seemed to be essentially associated with substantial oaths and Scotch whisky. The opinions of medical men varied enormously as to the amount of exertion needed to damage the heart. He thought that well trained muscle had a good reserve of energy, and was not easily exhausted. Under proper directions no injury, apart from accidents, need attend any of the games or contests carried on in this country, and by improving the physique of the nation they raised the health standard and the moral and intellectual character of the race. The medical profession were not always fit guides in these matters. The late Ian Maclaren, after looking over a medical gathering, had said to him that from a physical point of view they would compare rather unfavourably with a similar gathering of clerics. "Brethren, these things ought not so to be."

#### Section of Surgery.

In this Section an interesting paper was read by Dr. E. C. Hort (London) on "The Diagnosis of Cancer by Examination of the Blood." He said that operations and post-mortems showed that by present methods one case in six of cancer was missed in diagnosis, and if only the cases occurring in the first 21 years of life were taken, the disease was missed in one case in 2.3. The object of the paper was to show that it was possible to aid in the diagnosis of cancer by measuring the antitryptic power of the blood serum of patients. By the antitryptic power of the blood was meant the power that a serum had of antagonising *in vitro* the digestive activity of the ferment trypsin. This power is sufficiently constant in normal blood to be used as a standard, and is found to be raised in 94 per cent. of cancer cases. It was also raised in cases where auto-infection occurred, so was no proof of malignancy, but it was often a help in diagnosis.

#### Section of Public Health.

In this Section the President, Dr. L. C. Parkes (Chelsea) in his introductory address discussed some of the problems with which the medical officer of health is confronted, the chief of which, he said, was the urbanisation of the population. This led to several evils, the most serious being the deterioration of physique in the race. Much had been done recently to improve the lot of town dwellers, but they still suffered in many ways, and one of the chief was in the air they breathed. An enormous number of their fellow-citizens had to live in an atmosphere containing only one-third of the fresh air it ought to have. In London there was some improvement owing to the extension of the system of central heating for large buildings, and the greater use of gas for cooking.

The subject of the compulsory notification of tuberculosis was introduced in a paper by Dr. Harold Scurfield (Sheffield), where notification has been compulsory since 1903. Medical men had welcomed the Act, and the general public had not objected to it. His Excellency the Lord Lieutenant, who was present, afterwards asked specially about this point, and it appears that there was practically no opposition to compulsory notification. His Excellency said he would like to congratulate Sheffield on being so enlightened. Dr. McWalter (Dublin) strongly opposed notification. He thought that nothing would do more to create a feeling against proper treatment of tuberculosis than compulsory notification. It might be desirable where practically the whole population worked in factories and workshops, but he did not consider it desirable to introduce it all over the country. It was an interference with the liberty of the subject, and with the first principles of justice. He referred to the scare about consumption being a superstition of science. Sir Charles Cameron (Dublin) said that he did not agree with Dr. McWalter. Something must be done when there was a desperate disease, and if some inconvenience were caused to a few, it was nothing compared to the good achieved. In Dublin the deaths from tuberculosis exceeded by three times those from any other disease. Compulsory notification was also supported by Sir John Byers (Belfast), Dr. Nasmyth (Edinburgh), and Dr. Rentoul (Lisburn).

The disposal of sewage effluents in tidal waters was discussed by this Section on another day, the local conditions which have caused so much trouble and outlay in Belfast being well described by Dr. Henry O'Neill and Professor Letts. The discharge of great quantities of sewage into the sluggish tidal waters of Belfast Lough gives rise to trouble in two ways: it promotes an enormous growth of green seaweed, *Ulva Latissima*, which is cast up on the shore and there decays, giving forth sulphuretted hydrogen as it does so, and thus contaminating the air of the whole neighbourhood; and, secondly, it encourages the production of shellfish in the Lough, and these being full of sewage are frequently a source of poisoning to the lower classes of the city, who consume them in quantities if they can get them. The discussion was continued by Dr. Wilson (Belfast), Professor Dunbar (Hamburg), Sir Peter O'Connell (Belfast), Dr. Carnwath (Manchester), and the President of the Section, all agreeing as to the great difficulty of the problem.

#### Psychological Medicine.

In this section a paper which attracted much attention was read by Dr. W. R. Dawson (Finglass, Co. Dublin) on the Report of the Royal Commission on the Care and Control of the Feeble-Minded. The paper was of a technical character, and necessitated familiarity with the Report, which it criticised in a number of details, accepting most of its general principles. Dr. Shuttleworth (London), Dr. Maguire (Belfast), and Mr. Fagan (H.M. Inspector of Industrial Schools in Ireland) joined in the discussion. The last-named said that about 5 per cent. of the children under his care were mentally defective, and in these cases good results were obtained by the system of giving the children a practical manual education, instead of the usual school curriculum.

## LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

### "WITHOUT JUSTIFICATION."

To the Editor of THE MEDICAL PRESS AND CIRCULAR.  
THE following is reprinted from *The Times*, July 30th, 1909:—

"To the Editor of *The Times*."

SIR,—The attempt, mentioned in *The Times* of to-day, that is to be made to raise £35,000 in order to remove the National Hospital for Diseases of the Heart, which contains 26 beds, from its present position to a new site is without justification.

The London hospitals contain upwards of 10,000 beds, and, although I have not got the precise figures, I should say that of the occupants of these beds, on any day in any year, it is probable that 20 per cent. are suffering from heart disease. In the name of reason, of economy, of medical science, and of what represents everything that is best in hospital administration, what justification is there to support this appeal for £35,000? To the best of my judgment, and I believe I shall have the overwhelming consensus of medical opinion behind me in support of this view, it would be monstrous to waste £35,000 in the way proposed in the notice on page 14 of *The Times* of to-day. The voluntary hospitals are an inestimable boon to the people of this country, though the difficulty of raising funds for their support grows harder every year; and I feel it to be a public duty to ask you to publish this protest.

"I am, Sir, your obedient servant,

"HENRY C. BURDETT.

"Porchester Square, W., July 28th."

[The above is commented upon on page 107 of our present issue.—ED., M.P. AND C.]

### THE MEMBERSHIP DIPLOMA OF THE SCOTCH COLLEGE.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—Should the Edinburgh College of Surgeons not decide to grant a membership diploma, as requested by the Association of Scotch Diplomates, the Glasgow Faculty ought to be asked to take up the matter.

Some short time since the Council of the Faculty of

Physicians and Surgeons recommended, by a majority, that the title should be changed to that of "Royal College" of Physicians and Surgeons. When the question came before the Fellows it was defeated, but there is little doubt that an active agitation would soon result in a majority in its favour.

If an amendment to the charter for the purpose of altering the title were then obtained, it would be easy to get, at the same time, power to confer the diploma of member of the Royal College of Physicians and Surgeons, Glasgow.

I am, Sir, yours truly,  
F. C. McWALTER, M.D.Brux., F.F.P. and S.G.,  
Barrister-at-Law.

Dublin.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—In relation to the petition lately presented to the Council of the Royal College of Surgeons of Edinburgh *re* the qualification of Member in place of Licentiate, it may be of interest to note that in Schedule D. of the Medical Act of 1858 such qualification is actually specified, "Fellow and Member of the Royal College of Surgeons, Edinburgh," and by Sect. 16 the Registers are directed to be kept in accordance with this "Form." It may also interest you to note that I prosecuted an unqualified person last week who had assumed the title, "M.R.C.S.Edin.," and he was ordered to be imprisoned for a term in default of payment of the penalties inflicted. With respect to the amalgamation of the Royal College of Surgeons of Edinburgh and the Faculty of Physicians and Surgeons of Glasgow, this is, of course, made possible by Sect. L. of the Act of 1858.

I am, Sir, yours truly,  
A. G. BATEMAN,  
Gen. Secretary, Medical Defence Union.  
Medical Defence Union, 4 Trafalgar Square, W.C.,  
July 28th, 1909.

## OBITUARY.

PROFESSOR ALEXANDER FRASER, F.R.C.S.I.

A DECADE ago the teaching of anatomy in Dublin was in the hands of three notable men, notable as men of science and as teachers—Ambrose Birmingham, Daniel Cunningham, and Alexander Fraser. All three were in the prime of life, in the fullness of their powers, and now all three are gone. Five years ago we regretted the death of Birmingham, who, had he lived a little longer, would have seen the school he served so faithfully developed into a University department with suitable premises and equipment.

A few weeks ago we mourned the death of Cunningham, and now Fraser has gone. Alexander Fraser, Professor of Anatomy in the Royal College of Surgeons in Ireland, was born at Lossiemouth, in Scotland, in 1853. He was educated at Glasgow University, where he first took up the study of Anatomy under Professor Cleland. He thence went to Owens College, Manchester, as Demonstrator of Anatomy, and in 1883, on the appointment of Professor Cunningham to the Chair of Anatomy and Chirurgery in Dublin University, Fraser was nominated as his successor in the Royal College of Surgeons. From that time until a few months ago he devoted himself with rare assiduity to research in the subject of his life-work, and to the teaching of his classes. He made frequent communications to the scientific journals, and was a regular attendant at the meetings of the Royal Academy of Medicine. His best known work is his "Atlas of the Brain and Organs of Sense," but hardly a term passed without the publication of some memoir on an anatomic subject. In addition to his work at the Royal College of Surgeons, he was Professor of Anatomy at the Metropolitan School of Art, and he took special interest in anatomy as applied to art. In all his work, whether as a student or as a teacher, the outstanding feature was thoroughness. Superficial knowledge was his abhorrence, and he loved to give his pupils new views of anatomic relations. He taught them to dissect by unconstitutional methods, and woe to the candidate who met him with only a text-book knowledge.

As a teacher he was lucid, interesting, and painstaking to a degree. No trouble or labour was too much in making a difficult point clear to an eager pupil. His work could not fail to rouse gratitude from his classes, and at the time of his death his past pupils were busy arranging to give him a substantial recognition of his reaching the twenty-fifth anniversary of his appointment as Professor. A few months ago the Council of the College, at the annual dinner, presented him with a substantial cheque as a mark of their confidence and esteem.

It was not merely his zeal as a teacher and man of science, however, which endeared Fraser to his friends. His entire absence of self-seeking, his modesty, and his single-mindedness, secured the respect and affection of all who knew him.

Fraser's death is directly due to his unsparing devotion to work. Last spring his faithful and experienced porter died of sepsis, and Fraser, in his anxiety that his class should suffer no inconvenience, had personally to supervise the preparation of bodies in damp and unpleasant surroundings. He got a chill in such work, which gave tuberculosis a hold on his overwrought body, and in a few months his life's work was over.

## REVIEWS OF BOOKS.

THE AFTER-TREATMENT OF OPERATIONS. (a)

THIS is a very useful treatise, and leaves no question unanswered on the subject with which it deals. In his preface to the third edition, Mr. Mummery tells us that it has been necessary to make very extensive alterations and additions, and to re-write several of the chapters. The chapter on shock has been revised and brought up to date, and makes very interesting and instructive reading. Especially is the physiology of shock reviewed in a very terse and lucid manner, whilst the indications as to treatment are very properly based on the physiological facts. In the chapters on abdominal surgery the author gives some very valuable advice, not only on the after-treatment of straightforward cases, but also on the methods of dealing with the various complications which may arise, and on what is still more important—viz., the precautions to be taken for the avoidance of these complications. The chapter on post-anæsthetic complications, revised by Dr. Blumfeld, supplies the reader with some excellent hints, especially with reference to dealing with post-anæsthetic vomiting; the same remark applies to the chapter which deals with the care of patients after operations on the genito-urinary tract; this part has been revised by Mr. Thomson Walker. Serum and vaccine treatment of sepsis is dealt with in a short article, the pith of which may be summed up by the last words it contains: "The method of treatment is difficult and complicated. It can only be satisfactorily carried out by a skilled bacteriologist." Undoubtedly Mr. Mummery's little book should prove of great value, not only to the surgeon, but also to the house surgeon, and to all those medical men who have to look after the welfare of patients who have undergone an operation.

PYE'S SURGICAL HANDICRAFT. (b)

AN old friend, much grown in size, but withal rejuvenated and necessarily carried far beyond the intentions of the original author, this book forms a volume which should be of great use, not merely to house surgeons, but to every practical surgeon. In Chapter XIII. Mr. Clayton-Greene gives a short—perhaps too short—and temperate account of massage, manipulation, and passive movements in fractures in which he steers an excellent course between the rigid confinement of the old treatment and the massage combined with movement as so much advocated by some

(a) "The After-Treatment of Operations." By Lockhart Mummery B.A., M.B., M.C.Cantab., F.R.C.S.Eng. Third Edition. Pp. viii. and 251. London: Baillière, Tindall and Cox.

(b) "Pye's Surgical Handicraft." Revised and largely re-written by W. H. Clayton-Greene, B.A., M.B., B.C.Cantab., F.R.C.S.Eng. Pp. xvi. and 592. Bristol: John Wright and Sons, Ltd. London: Simpkin, Marshall, Hamilton, Kent and Co., Ltd.

surgeons at the present time. He shows us the advantages and the disadvantages of each, and every surgeon must cordially agree with him when he says:—"We would state clearly that both massage and passive movement can be overdone; this without for one moment disparaging the treatment under proper conditions." Chapter XXXVIII. deals with the minor surgery of the eye, and is by Leslie Paton. Mr. H. W. Carson has written Chapters XXXIX., XL., XLI., and XLVI., which treat respectively of diseases of the nose and throat, of the larynx and of the ear, and head injuries. Chapter XLII. gives the treatment of the teeth, and is by Norman G. Bennett. All these are evidently in safe hands; the same may be said of Chapters XLV., on the treatment of cases of poisoning, and LII., on urine testing, both by W. H. Willcox; Chapter XLVIII., on anæsthesia, by Joseph Blumfeld, and Chapter LIII., on X-rays, by G. Allpress Simmons. The work contains ten plates and 333 illustrations, all of which are of great help to the reader.

#### A MANUAL OF MINOR SURGERY AND BANDAGING. (a)

WHEN a book has reached its fourteenth edition in forty-nine years, without a break of more than five years between any edition, it may be fairly assumed to be very popular, and to have fulfilled during this period the purpose for which it was originally intended. All this can be said of this little work, which, although it has naturally increased in bulk, like the snowball rolling down the hill, is still of that handy size so convenient for those to whom it should be a boon—house surgeons, dressers, and junior practitioners. The introduction should be perused most carefully by those who hold resident appointments at any hospital, as an admirable line of conduct is traced out, which, if followed, would tend to do away with the small *désagrémens* which not unfrequently crop up in connection with these posts. If the directions Mr. Pollard gives with regard to asepsis in the operating theatre, preparation of the patient, case taking, etc., were followed out by all house surgeons, what a paradise surgeons would live in, and they could occasionally give a small sigh of contentment under cover of their gauze mask, instead of having to stifle (or not) a few selected anathemas. The manual, which contains 250 excellent illustrations and one plate, should be in the hands of all house surgeons and dressers, and, indeed, should continue to be their valued friend long after they have commenced practice.

#### ACCIDENTAL INJURIES TO WORKMEN. (b)

THE perfect book on accidents to workmen would be a very difficult, if not impossible, one to write, for not only has it to be compounded of law and medicine in varying proportions, but it must be so written that the lawyer can understand the medicine as the doctor understands the law. Moreover, there remains the intelligent layman, insurance manager, or whoever he may be, who wants guidance from both professions, and who must not be troubled too much with the technicalities of either. Among these difficulties Mr. Barnett and his coadjutors have steered a fairly successful course; indeed, it is doubtful if it is possible to do more in a work which has to cater for the three types of readers. The legal introduction is clear and well-written, but we are rather disappointed that the discussion of the important question, "What constitutes an accident?" is not dealt with more fully. What is said is sound, but could profitably be expanded. We like the definition given of an accident—for the purposes of the Workmen's Compensation Act, 1906—but we dissent from the last clause that the incident is "not a necessary accompaniment of the work engaged in." We fully admit the difficulty of definition, and think it rather courageous of the author

to tackle it, for the decisions of the Court of Appeal have widened the scope of the accident till the only definition that really covers the ground is "anything that the workman or his friends think ought not to have happened to him." It is clear from *Hughes v. Clover, Clayton and Co.*, if never before, that the incident alleged to have caused the injury may be a necessary and ordinary accompaniment of the work. A little fuller information would be acceptable, too, on the subject of compulsory operations, the effect of the Court of Appeal judgment quoted having been to a great extent nullified by a later decision that a workman is justified in refusing an operation, if one medical man advised against it. The effects of pre-existing disease, among which syphilis is one of the most important, constitute some of the gravest problems in connection with compensation claims, and Mr. Barnett rightly points out that companies will be forced, sooner or later, to institute medical examinations of employees to save them from the heavy loss occasioned by the aggravation, or alleged aggravation, of diseases by trivial accidents; such an event would be a very bad one for the workers. Regional injuries naturally constitute a leading feature in this book, but their bulk is so vast, and the subject so complex, that they are difficult to treat in all their bearings. The remarks made are sensible and suggestive, but when space is so valuable, we think that such points as the ordinary symptoms of fractures might have been omitted, and the after-results of these injuries, especially from the point of view of prognosis, more adequately set forth. The comments on hernia are good, and to the point, but we fear that hernia is almost a lost cause as far as resisting claims is concerned. There is a useful section on traumatic neurosis, and we cannot help regretting that this and the previous chapters were not extended, and the text of the Act, which follows, omitted. The latter can be bought so cheaply that it is a pity the space it occupies was not filled by amplification of the more important chapters. On the whole, though, this book is a distinct contribution to the subject with which it deals, and if the author adopts our hints in future editions, he will make his work even more useful and praiseworthy than it is at present.

## MEDICAL NEWS IN BRIEF.

#### British Pharmaceutical Conference.

LAST week pharmacists assembled at Newcastle-on-Tyne for the annual meeting of the British Pharmaceutical Conference.

The Presidential Address was delivered by Mr. J. F. Tocher, of Peterhead, in Armstrong College.

Taking as the title of his address "Some Problems of Interest to Pharmacists To-day," the President said it was in Newcastle-on-Tyne that for the first time British pharmacists met together as a voluntary assembly to discuss problems of interest to them. The institution of the British Pharmaceutical Conference as an organisation for the encouragement of pharmaceutical research in 1863, five years before the passing of the Pharmacy Act, which gave pharmacists a legal status, was an event of the greatest importance to pharmacists. Its avowed object of holding meetings in different parts of the country for the purpose of affording a periodical opportunity for pharmacists in the provinces to meet one another and discuss subjects of importance to them had ever been to the front.

The sale of patent medicines from the medical standpoint was, Mr. Tocher considered, of doubtful service to the community. British citizens spent about £4 6s. annually on alcohol, but only 1s. 4d. on patent medicines. Putting it more from the point of view of the pharmacist, he thought that if every registered chemist sold patent medicines he would draw on an average about £20 per annum from their sale. The average price of drugs and the character of prescribing 100 years ago and to-day had engaged his attention. The pharmacist paid on an average almost exactly one-half of what he paid 100 years ago for the same drugs. As far as prescribing was concerned,

(a) "A Manual of Minor Surgery and Bandaging" (Heath). By Bilton Pollard, F.R.C. Fourteenth Edition. Pp. xvii and 488. London: J. and A. Churchill.

(b) "Accidental Injuries to Workmen." By H. Norman Barnett, F.R.C.S., Surgeon, Cripple's Home, Belfast; with article on Injuries to the Organs of Special Sense by Cecil E. Shaw, M.A., M.Ch., M.D., Assistant Surgeon, Belfast Ophthalmic Hospital, and a Legal Introduction by Thomas J. Campbell, M.A., LL.B., Barrister-at-Law.

the character of the prescribing in 1810 was equal, if not distinctly superior, to that of 1909. He invited members to compare the samples he gave of both and consider whether the time had not come for a thoroughgoing agitation as to methods of prescribing. In connection with the revision of the British Pharmacopœia Mr. Tocher remarked that early in the year the Committee of Reference in Pharmacy appointed by the General Medical Council reported to the Pharmacopœia Committee the results of work done on the Pharmacopœia up to October 29th last. The recommendations appeared on the whole to be satisfactory, although it seemed to him that in certain directions the committee tended to go further than was desirable in a work issued by authority and used as a standard.

#### Royal Sanitary Institute.

THE following were admitted members during July: John A. Bisset, L.R.C.P., L.R.C.S. (M.O.H.), Boulder City, W. Australia; Douglas E. Darbyshire, M.B., Ch.B., M.R.C.S., L.R.C.P. (M.O.H.), Cottesloe, W. Australia; Walter L. Hawksley, M.B., Ch.B., D.P.H. (School M.O.), Education Offices, Liverpool; James W. Hope, F.R.C.P.Ed., D.P.H. (M.O.H.), Perth, W. Australia; Edward S. Humphry, M.R.C.S., L.R.C.P. (M.O.H.), Southern Cross, W. Australia; Launcelot M. Hungerford, L.R.C.P.I., L.R.C.S.I., L.M., Geraldton, W. Australia; Lewis E. W. Irving, M.D., C.M., D.S.O., Edmonton, Alberta, Canada; Robert M. Mitchell, D.P.H., M.B., F.R.C.S. (M.O.H.), Coolgardie, W. Australia; William M. Philip, M.B., C.M., D.P.H. (M.O.H.), Colombo, Ceylon; William P. Seed, M.R.C.S., L.R.C.P. (M.O.H.), Perth, W. Australia; J. E. Fergusson Stewart, M.B., C.M. (M.O.H.), Guildford, W. Australia; Andrew S. Young, M.B., B.S. (M.O.H.), Meekatharra, W. Australia.

#### Royal College of Physicians of London.

AT the ordinary quarterly meeting of the College, on Thursday last, the following Fellows of the College were elected officers for the ensuing collegiate year:—Censors.—Sir W. Allchin, M.D.; F. de Havilland Hall, M.D.; Seymour J. Sharkey, M.D.; J. Kingston Fowler, M.D. Treasurer.—Sir Dyce Duckworth, M.D., LL.D. Emeritus Registrar.—Dr. Edward Liveing. Registrar.—J. A. Ormerod, M.D. Harveian Librarian.—Dr. J. Frank Payne. Members of the Library Committee.—Norman Moore, M.D.; W. Osler, M.D., F.R.S.; A. F. Voelcker, M.D.; C. A. Mercier, M.D. Curators of the Museum.—Sir William Allchin, M.D.; S. J. Sharkey, M.D.; W. Hunter, M.D.; and F. W. Andrewes, M.D.

**New Members.**—The following candidates, having passed the required examinations, were admitted members of the College:—E. G. Fearnside, M.A., M.B. Camb., L.R.C.P., M.R.C.S., London Hosp.; W. E. Hume, M.B. Camb., London Hosp. and Berlin; J. Lindsay, M.D. Edin.; H. MacCormac, M.B. Edin., Middlesex; W. Malden, M.A., M.D. Camb., St. Barth.'s.; A. H. Miller, M.B. Camb., L.R.C.P., and M.R.C.S., Guy's; P. T. O'Sullivan, M.D., Roy. Univ., Ireland; L. G. Parsons, M.D. Lond., L.R.C.P. and M.R.C.S., Birmingham; and Ivy E. Woodward, M.D., B.S. Lond., Lond. School of Medicine for Women.

**New Licentiates.**—The following gentlemen, having conformed to the by-laws and regulations, and passed the required examinations, had licences to practise physic granted to them:—

R. B. Abraham, St. Thomas's; G. G. Alderson, Camb. and Univ. Coll.; F. J. Aldridge, Oxford and St. Thomas's; E. C. Alles, Ceylon, King's Coll. and Middx.; E. B. Allnutt, St. Bartholomew's; \*F. L. Angior, Liverpool; C. W. Archer, Camb. and St. Barth.'s; W. R. W. Asplen, Westminster; J. D. Benjafield, University Coll.; R. H. Bharucha, Bombay, K. Coll. and U. Coll.; T. K. Boney, St. Bartholomew's; J. M. Brito-Salazar, Caracas and Middlesex; S. S. Brook, Guy's; A. J. Brown, London; W. H. Cam, Camb. and London; A. S. Cane, Camb. and St. Barth.'s; R. S. Carey, Camb. and London; W. J. Chambers, Toronto and Middx.; K. S. Chasker, Bomb., U. Coll., K. Coll., and Middx.; H. M. McCoombs, Camb. and St. Barth.'s; M. M. Cowasjee,

Guy's; R. L. Crabb, Univ. Coll.; J. W. Cropper, Liverpool; C. H. Crump, Guy's; F. J. Cutler, Guy's; R. M. Dennys, St. Bartholomew's; G. V. Deshmukh, Bombay and London; A. MacD. Dick, Edinburgh; R. S. Doran, Charing Cross; M. A. E. Duvivier, Guy's; R. Fisher, Camb. and St. George's; R. H. W. Fisher, Camb. and St. Thomas's; A. L. Fitzmaurice, Guy's; P. L. Foote, Otago and London; J. C. Fox, Camb. and St. Thomas's; A. G. V. French, St. Thomas's; S. Gordon, Camb. and London; A. J. Graves, Columbia Univ., Char. Cross, and Middx.; J. M. Hammond, Bristol and St. Barth.'s; T. R. Harvey, Sheffield and Guy's; H. W. Heasman, Guy's; J. S. Hopwood, St. Thomas's; A. H. H. Howard, Charing Cross; D. Isaacs, Guy's; J. E. Jackson, London; G. Jefferson, Manchester; T. J. Johnston, Toronto and London; D. Kennedy, Univ. Coll.; M. H. Langford, Middlesex; \*W. Ledlie, Camb. and Guy's; R. J. B. Leney, Camb. and London; J. T. Lloyd, London; H. McLean, Camb. and London; R. H. S. Marshall, St. Mary's; B. C. Maybury, St. Thomas's; E. Mayer, Zurich and St. Barth.'s; C. A. Meaden, St. Bartholomew's; J. C. W. Methven, London; J. A. Noble, Oxford and St. Barth.'s; P. D. Oakley, Leeds; Pairs-Mall, Munich and London; W. R. Parkinson, Otago and St. Thomas's; R. A. Parsons, St. Mary's; F. C. Pridham, St. Thomas's; W. T. Quinlan, Cardiff and London; R. G. Riches, St. Bartholomew's; J. X. Robert, Toronto, London, and Birm.; H. D. Rollinson, Birmingham; L. M. Routh, Camb. and St. Thomas's; L. Russell, King's College; A. Ryland, St. Bartholomew's; I. Shorbagi, Cairo, St. Thomas's, and London; W. S. Simpson, Charing Cross; H. Smale, St. Mary's; W. J. Smith, Toronto and London; W. D. Southern, Charing Cross; C. G. Sprague, Guy's; B. A. W. Stone, Oxford and Bristol; W. W. Treves, Camb. and London; S. A. Vairakiam, Ceylon and London; J. van Schalkwijk, Camb. and St. Barth.'s; J. M. Weddell, Camb. and St. Barth.'s; T. H. Whittington, King's College; D. P. Williams, Charing Cross; S. S. M. Wood, Westminster; C. R. Woodruff, St. Bartholomew's. (\*Under regulations dated October 1st, 1884.)

#### The Irish Medical Schools' and Graduates' Association.

THE annual summer meeting and luncheon of this Association was held at the Medical Institute, Belfast, on Wednesday, July 28th. There was a large attendance of members and guests, including ladies. Sir Charles Cameron was in the chair, and amongst those present were the Rev. Dy. Thomas Hamilton, Vice-Chancellor, Queen's University, Belfast; Dr. Sinclair White, retiring President, British Medical Association; and Dr. E. Rayner, the Hon. Treasurer; Dr. Dawson Williams, Dr. J. A. Macdonald, Mr. H. A. Ballance, Mr. R. H. Kinsey, Drs. Smith Whitaker, A. Cox, Shepherd-Boyd, Buist, Mr. Guy Elliston, R. Fegan, J. H. Ewart Agnew, Rev. Dr. R. Seaver, Dr. J. J. Macan (Chairman of Council), Drs. T. Hobbs Crampton and W. Douglas (Hon. Secretaries).

#### Royal College of Surgeons, Ireland—Barker Prize.

A PRIZE of £21 is offered for competition, and is open to any student whose name is on the Anatomical Class list of any school in the United Kingdom. The preparations entered must be placed in charge of the Curator on or before April 30th, 1910. The prize is offered for a Dissection of the Cervical Sympathetic.

1. The preparations must be sent to the Curator of the Museum, Royal College of Surgeons, Ireland, each being marked with a fictitious signature, and accompanied by a sealed envelope bearing outside the same signature, and containing within,

(a) The full name of the Competitor, and

(b) A declaration to the effect that the work of the preparation has been carried out by himself.

The printed form necessary for this declaration can be obtained on application to the Curator.

2. The dissections are to be mounted in vessels fitted with glass covers, but the covers must not be sealed down. Earthenware basins and plaster of Paris settings are not compulsory if the specimens can be equally well displayed and preserved by other means.

3. No prize will be awarded unless sufficient merit

be shown, 70 per cent. of the total marks being the minimum. The following is the scale of marks:—(a) For the merit of dissection, 60; (b) for excellence of setting, 20; (c) for originality, 20; total, 100. The dissections for which prizes are awarded become the property of the College.

4. Those competitors who enter dissections for which prizes are not awarded, but which show sufficient merit, may be refunded such amount of the cost of production as the Examiners deem fit.

5. The cost and risks of transport must be borne by the student. The College will not be responsible for any damage the preparations may sustain; but those of unsuccessful competitors residing at a distance will be carefully re-packed and handed to the carriers for delivery at such address as may be specified by the student.

#### The Queen Alexander Sanatorium, Davos.

THE prospective opening of the Sanatorium for the reception of patients early in this autumn was announced from the chair at the sixth annual meeting of the Council, held at 11 Chandos Street, Cavendish Square, W., on July 16th, by the President, the Lord Balfour of Burleigh, K.T., P.C., who has laboured so long and successfully in the difficult task of raising funds. The magnificent donation of £25,000 just received from a munificent sympathiser, who desires that his name shall not be published, not only supplies the necessary balance to complete the work and to open the Sanatorium free from debt, but provides the means for its scientific equipment and for future extensions. For the present the Sanatorium will accommodate 54 patients, all in single rooms. But the public rooms are devised for a full complement of 120 patients.

The Davos Invalids' Home, the original foundation of the late Mrs. Lord, which for so many years was the only representative of our national charity in Davos, has now ended its task and fulfilled the purpose for which it was initiated—that of developing into a National Sanatorium. The Home had been granted Her Gracious Majesty's patronage as far back as 1899.

#### The Small-Pox Bacillus.

DR. OSWALDO CRUZ, Director-General of the Sanitary Service, announced recently at the Rio de Janeiro Academy of Medicine that the bacillus of small-pox, which was of animal origin, had been discovered in the course of bacteriological researches carried out at the Oswaldo Cruz Institute by Drs. Henrique Beurepaire de Aragao and Prowazek.—*Times*.

### PASS LISTS

#### University of Durham.

At the Convocation holden on Saturday, July 24th, the following degrees were conferred:—

Degree of Doctor of Medicine.—Vincent E. Badcock, M.B., B.S.Durh.; Charles W. M. Hope, M.B., B.S.Durh., F.R.C.S.; Elizabeth N. Niel, M.B., B.S., B.Hy., D.P.H.Durh.; Howard B. Stephenson, M.B., B.S.Durh.

Degree of Doctor of Medicine for Practitioners of Fifteen Years' Standing.—Thomas W. Bartlett, L.R.C.P. and S., L.F.P.S.G.; John Gay, M.R.C.S., L.R.C.P.; Henry J. Hildige, L.R.C.P. and S.I.; John L. Jeaffreson, M.R.C.S., L.R.C.P., L.S.A.; Edward S. Marder, M.R.C.S., L.R.C.P.; Joseph A. Nolan, M.R.C.S., L.R.C.P. and S., L.F.P.S.G.; Everett E. Norton, M.R.C.S., L.R.C.P., D.P.H.; Charles Reidy, B.A., L.R.C.P. and S.Ed.; Ernest Ringrose, M.R.C.S., L.R.C.P.; John G. Uppley, L.R.C.P. and S.; Alexander H. Walker, M.R.C.S., L.R.C.P.

Degree of Bachelor of Medicine (M.B.).—Wilfred Barkes, Alexander H. Bower, John G. Campbell, M.A., Harold A. Cooper, Patrick A. Galpin, Francis F. T. Hare, John P. Jackson, Theresa de G. Miller, Ruth Nicholson, Robert Raffle, Harold W. Sykes, Dorothea M. Tudor, George H. Wood.

Degree of Bachelor of Surgery (B.S.).—Wilfred Barkes, Alexander H. Bower, John G. Campbell, M.A., Harold A. Cooper, Patrick A. Galpin, Francis F. T. Hare, John P. Jackson, Theresa de G. Miller, Ruth Nicholson, Robert Raffle, Harold W. Sykes, Dorothea M. Tudor, George H. Wood.

Degree of Bachelor of Hygiene (B.Hy.).—Sydney Havelock, M.B., B.S., B.Sc., Durh.; Howard B. Stephenson, M.B., B.S.Durh.; Thomas L. Wormald, M.B., B.S.Durh.

Diploma in Public Health (D.P.H.).—Sydney Havelock, M.B., B.S., B.Sc.Durh.; William T. Sewell, M.D., B.S.Durh.; Howard B. Stephenson, M.B., B.S.Durh.; Frank T. H. Wood, M.D., B.S., B.Sc.Lond.; Thomas L. Wormald, M.B., B.S.Durh.

#### Royal College of Physicians and Surgeons of Edinburgh, and Faculty of Physicians and Surgeons of Glasgow.

THE Quarterly Examinations of the above Board, held in Edinburgh, were concluded on July 23rd, with the following results:—

The following candidates passed the First Examination:—Charles C. Forsyth, Stanley E. Jones, John McCagie, Maneckjee R. Dalal, India; Burjor M. Nanavutty, Poona; William W. K. Duncan, Frederick G. Gibbs, Edward A. Neilson, N.Z.; Charles H. N. Baker, India; Verdon C. H. Dearden, John M. Hiddleston, William Ainsley, Dani Chand, Jullimdur; Paul L. Manuel, Mauritius; Alfred Parker, James B. Donaldson; and 7 passed in Physics, 14 in Biology, and 4 in Chemistry.

The following passed the Second Examination:—Frank M. H. Sanderson, Burjor M. Nanavutty, Poona; Hugh W. M. Wallace, William Elder, James McFarlane, Charles S. Ogilvy, William C. Davis, Norman S. Williams, India; Charles E. H. Smith, Robert Trotter, James Mitchell, Cyril M. Willmott, William S. Lindsay, Hormazd A. Topalia, Bombay; Andrew Hegarty, Walter S. Durward, David W. Woodruff, Wilhelm S. Rorich, Cape Colony; Rona Lockhart, William L. Coullie; and 7 passed in Physiology.

The following passed the Third Examination:—Maneck B. Motafram, Bombay; Robert E. N. Martyn-Clark, Punjab; Edward D. Ellis, Morris Greene, Russia; Ernest J. Fisher, Prabodh C. Banerjee, India; Emmanuel P. Ghose, India; Vasudeo D. Nimbkar, India; Henry E. K. Fretz, West Indies; Singcha Hoashoo, S. America; Henry G. Lamberty, Mauritius; Charles K. Carroll, India; Charles J. Evans, Samuel E. A. Acheson, Zebina A. De Cruz, Cochín-India; George F. Walker, Philip G. Phillips, Maneckjee R. Dalal, India; Richard L. Hughes; and 1 passed in Pathology and 4 in Materia Medica.

The following passed the Final Examination, and were admitted L.R.C.P.E., L.R.C.S.E., and L.F.P.S.G.:—Edward D. Ellis, Halifax; James Reid, Belfast; Augustus J. Kelsey, Mauritius; Francis W. Milne, Helensburgh; William G. Forde, Co. Cork; John J. Huston, Ireland; Joseph Muller, Bombay; Henry G. Ramsbottom, Whalley; William Taylor, Ireland; Sydney G. Tibbles, James E. R. Ramdeholl, British Guiana; Edmund Eccles, Longridge; Maria S. Allen, Stafford; Kul Bhusham, Punjab; Edwin W. Marsh, Rangoon; Archibald C. Tait, Newfoundland; James S. J. Stenhouse, Dunedin; Jugal K. Sharma, Moradabad; McWilliams Henry, Halifax; Arthur I. Luke, India; Robert Massie, Edinburgh; Thiruchelvam Sabastian, Madras; Abhayabala Singha, Amritsar; Louis N. Robertson, Trinidad; Norman C. Shierlaw, S. Australia; Chandiprasad Trivedi, India; and 7 passed in Medicine and Therapeutics, 2 in Surgery and Surgical Anatomy, 12 in Midwifery, and 12 in Medical Jurisprudence.

#### Royal College of Surgeons of Edinburgh.

At a meeting of the College held on July 22nd, the following gentlemen were elected Fellows:—Richard W. Anthony, M.B., C.M., I.M.S.; Alexander W. Beveridge, M.B., Ch.B.Edin.; Frederic J. Brodie, M.D.Toronto; Robert Donaldson, M.B., Ch.B.Liverpool; Ethelbert W. Dyer, M.B., Ch.B.Edin.; Edward A. Elder, M.B., Ch.B.Edin.; Carlton A. Ellis, M.R.C.S.Eng.; Ernest G. French, M.D., R.A.M.C.; Samuel T. Irwin, M.B., M.Ch.Belfast; Harley P. Milligan, M.D.Edin.; Ronald R. Murray, M.B., Ch.B.Edin.; Herbert C. Orrin, L.R.C.S.Edin.; John A. Pottinger, M.B., Ch.B.; Eliyatamby V. Ratnam, L.R.C.S.E.; Harold E. Rawlence, M.B., M.R.C.S.Eng.; Alexander M. Westwater, L.R.C.S.E.



## NOTICES TO CORRESPONDENTS, &c.

**NOTES.** CORRESPONDENTS requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

### SUBSCRIPTIONS.

SUBSCRIPTIONS may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s.; post free at home or abroad. Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially-appointed agents. Indian subscriptions are Rs 15.12. Messrs. Dawson and Sons are our special agents for Canada.

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CONTRIBUTORS are kindly requested to send their communications, if resident in England or the Colonies, to the Editor at the London office; if resident in Ireland to the Dublin office, in order to save time in reforwarding from office to office. When sending subscriptions the same rule applies as to office; these should be addressed to the Publisher.

Mr. W. E. R. should address his protest to the Secretary of the British Medical Association. It is a matter over which we have no concern or control.

SCHOOL MEDICAL OFFICER.—A good paper on the subject of the "Control of Diphtheria in Schools" was read by Dr. T. Orr at the recent Congress of Medical Officers of Health at Leeds. He classified carriers under three heads:—(1) Those having diphtheria bacilli in their throats without showing, and without having shown, signs of the disease; (2) those suffering from a mild and unrecognised attack of diphtheria; (3) those recovering from this attack, recognised or unrecognised.

### A CONSIDERATE LUNATIC.

Not long ago a well-dressed man called on a medical man in the Rue de la Chapelle, and was ushered in by the servant. When the doctor entered the salon he was very much surprised to find his patient, completely undressed, sitting in the middle of the room, smoking a cigar.

"I did not wish to make you waste your time," said the visitor. "I'm afflicted with a skin affection, and so I undressed at once. Just order a vinegar bath for me."

The doctor sent for a couple of policemen, and the strange individual was assisted into his clothes, and taken off to the nearest police station. He was found to be a domestic, who was suffering from mental derangement.—*Globe*

DR. J. JOHNSON.—The question was raised editorially in our last week's issue, and is referred to in the correspondence column of our present number.

DR. H. S. W. is thanked for his communication, which we highly appreciate.

DR. J. E. B.—"All's well that ends well." In the present case there will be no action at law, and we are glad to know that expectant lawyers will not have the opportunity of "dividing the spoil."

## Appointments.

BEDD, ARTHUR, M.B., B.S.Durh., Medical Officer of Health of Launceston (Cornwall).

BUNTON, DUDLEY W., M.D., B.S.Lond., M.R.C.P.Lond., Lecturer to the newly created Lectureship in Anaesthetics at the Royal Dental Hospital of London.

CEALMERS, T. A., L.R.C.P. and S.Edin., L.F.P.S.Glasg., Certifying Surgeon under the Factory and Workshop Act for the Harris District of the county of Inverness.

DAILY, J. F. HALLS, M.D.Cantab., M.R.C.P.Lond., Physician to the St. Marylebone General Dispensary, Welbeck Street, W.

FLINT, H. L., M.B., Ch.B.Leds, House Physician at the General Infirmary, Leeds.

HACKNEY, C., L.R.C.P.Lond., M.R.C.S., Certifying Surgeon under the Factory and Workshop Act for the Hythe District of the county of Kent.

HUNT, ERNEST, L.R.C.P.Lond., M.R.C.S., Medical Officer for the Kingsteigton District by the Newton Abbot (Devon) Board of Guardians.

KEYSER, CHARLES R., F.R.C.S.Eng., Surgeon to the Cancer Hospital, London.

MACK, E. G., M.B., B.S.Lond., House Surgeon at University College Hospital.

OLDFIELD, CARLTON, M.D., B.S., M.R.C.P.Lond., Honorary Surgeon to the Hospital for Women and Children, Leeds.

SAVAGE, WILLIAM GEORGE, B.Sc., M.D.Lond., L.R.C.P., M.R.C.S., D.P.H., Medical Officer of Health for the County of Somerset, and Medical Officer of Schools to the Somersetshire County Council.

SINCLAIR, HAROLD WEIGHTMAN, M.D.Lond., L.R.C.P.Lond., M.R.C.S., D.P.H.Lond., School Medical Inspector by the Gloucestershire Education Committee.

SPEARMAN, R., M.B., B.C.Cantab., Certifying Surgeon under the Factory and Workshop Act for the Clacton-on-Sea District of the county of Essex.

THOMSON, H. A., M.D., F.R.C.S.Edin., Professor of Surgery in the University of Edinburgh.

WALTERS, CHARLES FERRIER, F.R.C.S.Eng., L.R.C.P.Lond., Honorary Assistant Surgeon to the Bristol Royal Infirmary.

## Vacancies.

British Ophthalmic Hospital at Jerusalem.—Assistant Ophthalmic Surgeon. Salary £300, with house. Applications to the Honorary Secretary, British Ophthalmic Hospital, St. John's Gate, Clerkenwell, E.C.

Victoria Hospital, Burnley.—Resident Medical Officer. Salary £100 per annum, with residence, board, and washing. Applications to F. A. Hargreaves, Hon. Secretary, 7, Grimshaw Street, Burnley.

Parish of St. Leonard, Shoreditch.—Second Assistant Medical Officer. Salary £100 per annum, with rations, washing, and furnished apartments in the Infirmary. Applications to Robert Clay, Clerk to the Guardians, Clerk's Office, 213, Kingsland Road, N.E.

Salford Union.—Senior Assistant Resident Medical Officer. Salary £150 per annum, with furnished apartments and attendance. Applications to F. Townson, Clerk to the Guardians, Union Offices, Eccles New Road, Salford.

The Middlesex Hospital, W.—Lady Superintendent. Salary £150 per annum, with board and residence. Applications to F. Clare Melhado, Secretary-Superintendent.

St. Mary's Hospital for Women and Children, Plaistow, E.—Senior Resident Medical Officer. Salary £100 per annum, all found. Applications to Percy J. Glenton, Secretary.

Wigan Infirmary.—Junior House Surgeon. Salary £100 per annum, with rations and apartments. Applications to Will Taberner, Gen. Supt. and Secy.

Dorset County Hospital, Dorchester.—House Surgeon. Salary £100 per annum. Applications to W. E. Groves, Valetta, Icenway, Dorchester.

Leeds Union.—Assistant Medical Officer. Salary £120 per annum, with board, washing, apartments, and attendance. Applications to the Medical Superintendent at the Union Infirmary, Beckett Street, Leeds.

Royal Lancaster Infirmary.—House Surgeon. Salary £100 per annum, with residence, board, attendance, and washing. Applications to the Secretary.

The Children's Infirmary, Carshalton, Surrey (under the Metropolitan Asylums Board).—Assistant Medical Officer. Salary £150 per annum, with board, lodging, and washing. Applications to the Clerk to the Board, Embankment, London, E.C.

## Births.

BOKENHAM.—On July 26th, at Highview, Wokingham, Berks, the wife of Thomas Brandon Bokenham, Esq., M.R.C.S., L.R.C.P., L.S.A., of a daughter.

MILLIGAN.—On July 26th, at 11, Upper Brook Street, London, W., the wife of W. Anstruther Milligan, M.D., of a son.

NATHAN.—On July 28th, at 50, Harrington Gardens, London, the wife of Sidney Nathan, M.D., of a son.

ROST.—On July 27th, at Rangoon, the wife of Major E. Rost, I.M.S. (*née* Profumo), of a son.

## Marriages.

CECIL.—PORTEOUS.—On July 28th, at St. Katharine's Church, Southbourne, Charles Cecil, youngest son of the late Henry Cecil, of Bournemouth, to Marjorie Porteous, only daughter of the late Robert Burnet Porteous, M.D., of Dumfries.

CHAPLIN.—DOUGAL.—On July 29th, at St. Columba's, Pont Street, London, Arnold Chaplin, M.D., F.R.C.P., 3, York Gate, London, and 41, Finsbury Square, London, to Margaret Douie, widow of William Dougal, and eldest daughter of the late J. H. Robertson, J.P., M.D., of Singapore and Edinburgh.

CRABTREE.—BERRIDGE.—On July 29th, at St. Matthew's Church, Redhill, Frederick Lane Crabtree, of Sunningdale, Berks, son of the late Rev. E. W. Crabtree, of Darlington, Yorks, to Helen, elder daughter of William Alfred Berridge, M.R.C.S., of Oakfield, Redhill.

## Deaths.

BISHOP.—On July 27th, Augusta, widow of Captain T. Bishop, of Waylands, Uxbridge, and late of Bay View, Shanklin, I. of W.

CALDERON.—On July 26th, at Alsager, Stoke-on-Trent, Kathleen, the dearly loved wife of Commander John J. W. Calderon, R.I.M., and daughter of A. L. Haynes, M.D., Evesham, aged 28 years.

FRANCIS.—On July 29th, at Teddington, Emily, widow of the late Thomas Francis, M.R.C.S., L.R.C.P., of Acton, Middlesex, aged 90 years.

HOWAT.—On July 28th, at 8, Devonshire Terrace, Ventnor, I. of W., George Rutland Howat, B.A., M.D., in the 62nd year of his age.

PHILLIPS.—On July 27th, at Savoy Mansions, London, W.C., Alfred Phillips, M.R.C.S., aged 68.

SECCOMBE.—On July 28th, suddenly, of heart failure, at Luesdon, South Devon, Edward Hepburn Seccombe, M.B.Lond., of Belgrave Road, London.

# THE MEDICAL PRESS AND CIRCULAR.

"SALUS POPULI SUPREMA LEX."

VOL. CXXXIX.

WEDNESDAY, AUGUST 11, 1909.

No. 6.

## NOTES AND COMMENTS.

### A Membership for Scotch Diplomates.

As pointed out in previous issues, the question of a membership diploma is one of considerable importance to Scotch diplomates. Is there any substantial reason why a request of apparently so reasonable and moderate nature should not be granted? According to Dr. F. C. McWalter, the Council of the Glasgow Faculty of Physicians and Surgeons have recommended that their cumbersome—it might almost be said their grotesque—title should be altered to that of "Royal College of Physicians and Surgeons." That proposal was defeated by the Fellows in whom, for some inscrutable reason, the government of the College has been vested. Why should not the licentiates of the Colleges of Edinburgh and Glasgow, who are in the vast majority, be permitted to have a voice in their own affairs? It is their money that has fed the Colleges, and now that the irresponsible governing bodies are asked to extend to their diplomates a favour which will not only cost nothing, but will actually bring, if desired, large additional revenues to the College, they refuse, and give no reason for their refusal. The incident shows, at any rate, that the interests of the licentiates and those of the Councils are not identical, and that the Councils are not disposed to bestir themselves on behalf of the men whose fees they have accepted. When these facts are more fully realised, together with the disadvantages of starting practice on a licentiateship qualification, we may expect a falling-off to the point of zero of applicants for the qualification of the Scotch Colleges.

### What will Happen Then?

THEN, possibly, when too late, the Scotch Colleges will realise how comparatively easy it is to kill the goose that lays the golden eggs. For many a year there has been an exodus of students to Scotland, whither they have been attracted by the soundness of the teaching, and in some instances by a somewhat lessened standard of examination. In justice to the Colleges, it should be said that their examinations have been for many years past of a thoroughly sound and searching nature. It is just as easy now for any man of average abilities and industry to take an English diploma or the degree of a local English University. Why, then, should he journey afar to another part of the kingdom, where he has to work just as hard and as long, and where he pays just as much money, but gets in return an inferior article in the shape of a Licentiateship? The whole thing, when reduced to any sort of analysis, shrinks into the proportions of a full-blown absurdity. From more points of view than one, we think the Edin-

burgh Colleges will do well to be wise in time and to make a bid for some return of their waning popularity by reconsidering their determination to retain at all costs their time-worn traditional titles. According to Dr. A. G. Bateman's letter in our issue of August 4th, the Council of the Edinburgh College of Surgeons is specifically empowered to confer the title of Fellow and Member, with apparently not the least mention of the licentiateship. What has the R.C.S.Ed. to say to that?

### Paid Hospital Work.

HOWEVER anomalous it may be for the visiting staffs of hospitals to be unpaid, the old tradition of honorary service is likely to remain unbroken so long as selected medical men alone serve on the staff. The *kudos* of a hospital appointment is such, that as long as there are medical men with private means who can afford to wait for practice, or those of great ability or energy who can gain a livelihood in other ways, there will be no dearth of candidates. In this matter, as in every other commercial transaction, the question is one of supply and demand, and hospital boards are not likely to offer salaries out of their precarious incomes when they can get the work efficiently done for nothing. We wonder sometimes what difference the payment of hospital staffs would actually make in practice. No doubt the competition for posts would be even keener than it is now, but with this extra competition, qualification upon qualification would be piled up, the term of waiting for a vacancy would be by no means reduced, and the man without private resources, either earned or unearned, would be worn down in that waiting at least as much as he is at present. So that the probabilities are that unless with the salary attached to the post there went some corresponding payment for the junior posts, the individual composition of the staff would probably be little affected.

### Barry Docks Hospital.

THE point has been raised rather acutely at Barry, where hitherto the Town Accident and Surgical Hospital has enjoyed the services of an honorary staff. Lately, questions of administration arose in connection with practitioners whose private patients were treated there, and various proposals were made to meet the circumstances. The matter was taken up by the British Medical Association which has now submitted a scheme to the hospital committee, suggesting some interesting changes. It is proposed that every member of the profession in the town of six months' standing, should be allowed to act on the staff in rotation, and that a payment of a fixed honorarium should be made to each member, £20 for a three months' term being suggested. The

committee expresses some surprise that payment should be looked for, but it was explained to them that it would cease to be a distinction to serve on the staff, and that, therefore, the market rate of wage would be looked for as compensation. We are unwilling to criticise a scheme which may, for aught we know, be suited to some peculiar circumstances of the locality, especially as it has received the unanimous endorsement of the Cardiff Division, but we may say *en passant* that we can imagine very few districts, of an urban nature, in which any such plan would work harmoniously for any length of time.

#### Dentists and Anæsthetics.

THE question whether qualified and registered dental surgeons should be authorised to administer anæsthetics, or, at least, nitrous oxide, was answered in various voices before the Departmental Committee on Coroners' inquests, the interim report of which has been already issued. Dr. Hewitt expressed his conviction that in dental operations the same man should not administer the anæsthetic and perform the operation, and contended that it was not desirable that qualified dentists should administer even "gas." It was his belief that a Bill prohibiting dentists from using anæsthetics would raise the status of the profession and help to stop quack practice. Dr. Dudley Buxton disagreed in several respects with the evidence offered by Dr. Hewitt. He considered that it would be a hardship on registered dentists and a great inconvenience to the public if they were not allowed to administer gas. He also thought that the prohibition would lead to their employing other agents, such as cocaine, which would be probably more dangerous. Mr. Leonard Matheson, ex-president of the British Dental Association, agreed with the evidence of Dr. Dudley Buxton, and they both supported Dr. Hewitt in condemning the practice of administration of an anæsthetic by the same man who was to perform the operation. There certainly seems much to be said in support of the view of Dr. Dudley Buxton, and this view was forcibly put forth in our correspondent columns recently by a leading dentist, an ex-president of the Odontological Society. A properly qualified dentist is a professional man whose education has included study of general medicine and surgery sufficient to enable him easily to master the art of simple anæsthesia, as represented, at any rate, in the use of nitrous oxide for tooth extraction. To sanction the employment of anæsthetics by this class—men imbued with professional responsibility—is a different thing from conferring the same privilege upon unqualified practitioners.

#### A Cool Request.

THIS privilege was asked for before the Committee by a gentleman who represented himself to be Secretary of the Incorporated Society of Extractors and Adaptors of Artificial Teeth. If such sanction were afforded by the legislature, there would be no possibility of restricting unqualified practice in any department. It would be made impossible for the public to distinguish between unqualified and qualified practitioners, and the beneficial effects of the Dentists' Act in this direction, now becoming so visible, would be at once put an end to. It is not likely that the legislature will seriously consider such an innovation. Men who elect to practice without legal qualifications must do it at their own risk. The object of the law must be merely to make it as certain as possible that the simple public shall not mistake men who can give no guarantee

whatever of competence for those who have been properly educated, and have proved their capacity by examination.

## LEADING ARTICLES.

### THE ROLE OF SPECIAL HOSPITALS.

THE claim of a correspondent in the *Times* that the proposed scheme of the governors of the Heart Hospital, in Soho, to erect a new institution at a cost of £35,000 is "without justification," raises again the question of the rôle of special hospitals. It is essential at the outset to take a broad-minded view of this matter. There is, for example, too much tendency in the present day to forget the great services to the profession, and even to the State, which the special hospitals have accomplished in the past. One of the first of these details to which attention may be especially directed is that they have proved to the large general hospitals the necessity of establishing special departments as part of their organisation. Not only have the special hospitals shown the necessity of these special departments, but they have also provided the details for construction and equipment of the same, by which it has been possible to ensure that the usefulness for teaching purposes of these departments can be relied upon. Moreover, no one can possibly deny the great position which these special hospitals occupy as teaching centres themselves, not so much perhaps to the general student, but to those who, having determined their speciality, seek to gain their knowledge of it by studying at the hospitals concerned. And there is no exception to this rule. All special hospitals must, perforce, fulfil this rôle for teaching purposes. They naturally become centres of instruction, with which the special departments at the general hospitals can in no way compete. For the most part the latter are officered by certain members of the staff who are either engaged in general medicine or surgery, or whose special hospital practice is confined to the special department over which they preside; that is to say, many of them are not specialists in the strict sense of the term, and it not infrequently happens that as soon as their work in other directions advances in magnitude, they signalise their claim to be specialists by resigning their special appointments. All these points arise from a general consideration of the subject. We will now descend to the particular, and proceed to inquire whether, in our opinion, the "without justification" claim, in regard to the Heart Hospital, is rightly based, having regard to the circumstances of the case. In the first place, reference may be made to the fact that the two great hospital funds have initiated a scheme compelling the amalgamation of certain special hospitals. This policy may be—possibly is—a right one from an economic point of view in the case of hospitals engaged in the same class of work. On the other hand, however, this scheme of amalgamation cannot be made to apply to the Heart Hospital, inasmuch as it is the only one of its kind in the metropolis. As, therefore, this is the case, and as the pet scheme of amalgamation is inapplicable to it, and mainly, too, because the institution is a small one, the governors and

the public have been told through the *Times* that its work is unneeded, and its claim for support "without justification," on the grounds that there are many empty beds in the medical wards of the general hospitals, to which its patients should be referred. No one who is prepared to concede the important rôle played by the special hospitals in the education of the profession, could possibly admit the soundness of this argument. If it be granted that there is specialism in heart diseases, and "heart specialist" is a title recognised in the profession, a hospital for diseases of the heart, where the speciality can be practised and advanced, seems only to be in accord with the natural fitness of things. In a very mild letter to the *Times*, the secretary of the Institution replies to the attack made upon the governors, in doing which we think that he has omitted to state many points to which public attention should have been directed. Meanwhile, we commend to the governors of the hospital the position in which they stand, in our opinion, from the professional point of view, and we doubt not, if the matter were to be placed clearly before the charitable public that no great difficulty would be experienced in raising the sum for which they propose to appeal.

#### MEDICAL CHARITIES AND COMPENSATION CASES.

THE complex nature of our modern social system is nowhere better illustrated than in the various extramural relations of the voluntary medical charities. For generations past the voice of the general practitioner has been raised against the evils of hospital competition. A week ago it was raised with no uncertain sound against the discharge by the medical charities of the duty of attending school children. It is clear that if the hospitals attend these patients gratuitously they are taking upon their shoulders the burden that belongs to the State, and that should be referred to the medical profession and paid for by the State. It is somewhat surprising that any responsible public hospital should be willing to enter into any agreement with the local education authorities for the treatment of defective school children, gratuitously or otherwise, in view of the emphatic disapproval of the medical profession. Yet one of the largest London hospitals has agreed to provide for that class of patients without payment. Should medical men ever reach the stage of an effective fighting force the day of reckoning will come for institutions that have for so long a time treated outside medical men with contemptuous indifference. Another point in which the medical charities have recently come into competition with medical practitioners is in the administration of the Workmen's Compensation Act. Any poor person injured in the course of his employment, be the injury trivial or serious, goes off to a hospital for treatment in nine cases out of ten. Equally as a matter of course the patient applies for a certificate in order to apply for compensation. The certificate is furnished without fee, and signed by members of the honorary staff. As an outcome of the transaction the hospital suffers, the honorary member of the medical staff is drawn into gratuitous work for which he is not responsible, while the workman secures an important legal document whereby

he obtains a substantial sum of money, not a single penny of which goes to the benefit of the profession whose services are essential at every stage of the transaction from start to finish. Well may the general practitioner throw up his hands in despair and declare that his days are numbered in the land! One discouraging aspect of the affair is the difficulty of making persons outside the medical profession understand that there is anything economically unsound or unjust in the granting of certificates by hospital authorities for use in compensation cases. A few weeks since, in Sheffield, a County Court judge declaimed against the system of hospital certificates, not on the ground of their injustice, but because they were supplied to employers, and he suggested with an indefensible want of manners that hospital officials acted as spies upon patients, and supplied employers with information inimical to compensation claims. Judge Dodd may be comforted by the reflection that the "spies" are, at any rate, unpaid. We doubt if there is often laid before him any sort of evidence so clean, so clear, so unbiassed, and so relatively accurate as the medical certificates based upon the hospital notes, which constitute the documents that excited his ire. The objection that the majority of medical practitioners have to the certificates does not arise on the score of accuracy or of good faith, but from the prosaic fact that their gratuitous issue deprives a hardly-worked and poorly-paid profession of its just due. Let Judge Dodd inquire how many documents come into his Court that have been given without charge by lawyers to poor clients. As regards disputed claims, we have always maintained that conflicting medical evidence in law courts lowers the profession in the eyes of the lay public. We have urged on various occasions the desirability of some machinery whereby any unseemly wrangle could be avoided. All such cases might be investigated by three referees appointed by the Court, and the facts for and against could be stated by them without fear or favour. Meanwhile, as regards the practical issue of the gravity of hospital reports in compensation cases, it is to be hoped that an authoritative opinion will be issued by the medical profession for the guidance of those institutions whose boards of management do not wish utterly to disregard the legitimate interests of the rank and file of the medical profession.

#### CURRENT TOPICS.

##### Ophthalmia Neonatorum.

A CORRESPONDENT has reminded us of an editorial article published in THE MEDICAL PRESS AND CIRCULAR of April 1st, 1908, in which the use of the term "ophthalmia" is adversely criticised, and the substitution of "conjunctivitis" advocated. It was by no means our intention to turn an old friend like "ophthalmia" out into the wilderness of oblivion. The wish of all scientific men, of course, is naturally to aim at the use of words that are more and more accurate and informing, that is, words which denote and connote more than their predecessors. For all that, a good general term has its value in terminology, and when qualified by one or more limiting adjectives, it is often most convenient and adaptable for descriptive purposes. The word "ophthalmia" is sanctioned by usage, and it will need more than a few fleeting journal paragraphs to root it out of our text-books. Few medical men would be at a loss, moreover, to understand what is meant by such terms as granular ophthalmia, or ophthalmia neonatorum.

It is true of the latter condition that only a majority of the cases are due to the specific pathogenic agency of the gonococcus. To call the affection conjunctivitis neonatorum is, therefore, to travel little more in the direction of accurate definition than if we adhered to the old term. To secure more absolute accuracy we should have in all cases to tack on the name of the actual causative micro-organism. There would then be little to choose between gonococcal ophthalmia neonatorum and gonococcal conjunctivitis neonatorum. Ophthalmia, again, is a convenient general term descriptive of a whole series of secondary and more or less remote changes which would not be embraced by conjunctivitis. Upon the whole, most medical men will probably think the matter is about as broad as it is long. It is a point that in the days of the ancient school men might have raised a strife of gargantuan dimensions, but nowadays is likely to be permitted to settle itself amid the rush and hurry of progressive modern science. There is even a remote chance that our old friend ophthalmia may one day follow the example of so many words of ancient lineage, and take unto itself a secondary meaning. In any case, we are obliged to our correspondent for pointing out our own inconsistency in adhering to the old order of things, after so vigorously dwelling upon the quite respectable virtues of the new.

#### The Economic Aspect of Acute Appendicitis.

THERE is no doubt that some diseases have an utilitarian and economic aspect, and in none is this feature so noticeable as in acute appendicitis. The age is one of rush and hurry, one in which there is no time to be ill, no leisure to eat and be satisfied, no time to attend to anything beyond the urgent calls of professional and business cares. "You must pull up," says the doctor to an over-worked and harassed patient, "and take a holiday at once." "My good sir," is the reply, "I simply have not the time." And so, despising the warning, men either soon become physical wrecks, derelicts of the age, or pass from this life into a premature grave. Fortunately, however, for some, a sudden illness befalls them; in a few hours they find themselves lying on a bed from which they cannot move. A surgeon is summoned, and the verdict is acute appendicitis. Then follows an urgency operation, nowadays, when performed under favourable conditions, a safe and trustworthy procedure, one which necessarily compels a man to rest, one which affords him plenty to think about, without leaving much opportunity for worry concerning his professional and business affairs. Meanwhile, he is always resting, without being actually ill, after the first few days of relief having been obtained. In a month's time he is practically convalescent; his life has been doubly saved, saved by the operation, and saved by the enforced rest to which he has submitted. And in due time he is enabled to embark upon a new lease of life, of which added strength, both of mind and body, are features which he is the first to recognise and appreciate. Verily, as the experience of operating surgeons has frequently shown, an attack of appendicitis has proved "a blessing in disguise" to many an over-worked man in the present "high speed" age.

#### Ambulance Service for London.

AFTER long years of waiting, the agitation in favour of a street ambulance service for London has reached the stage at which a Bill to establish such

a service has been presented to Parliament. The measure is to be brought in by Mr. Peel, a member of the London County Council, who, curiously enough, wishes to make the Metropolitan Asylums Board the authority of its administration. It will be remembered the Home Office Committee, which recently inquired into the question, recommended the same authority, Sir William Collins, in a minority of one to two, advocating the County Council. For reasons we have already given, we think it is clear that the County Council should be the authority, if the police are not to be, and we are sure a much more efficient service would be given by them. But we earnestly trust that the measure will not be hung up on this point. An ambulance service is a crying necessity, and has been so for years; the number of street accidents is growing every day with the advent of more and more motors on the streets, and the amount of unnecessary suffering is immense. The whole Bill could be run through its three stages in ten minutes if taken as an unopposed measure, and we cannot believe that those who really have the interests of London at heart will see this reform kept back on a point which, after all, is of minor importance.

#### Progress in Obstetrics.

THE Address in Obstetrics, delivered before the British Medical Association by Sir John Byers, was an admirable summary of the progress in the obstetric art since the last Belfast meeting of the Association, twenty-five years ago. The principal point of progress has been as regards sepsis. Whether judged by mortality or by some standard of morbidity, the improvement is enormous. In 1882, Macan, as Master of the Rotunda, reported the hospital as "particularly healthy." Yet in that year nine patients out of 1,109 had died, while over 25 per cent. were "morbid," as judged by modern standards. In 1907, out of twice as many patients seven died—three only of infection—while only 3.64 per cent. were morbid. Other maternities show a similar contrast. Again, in the country generally there has been a similar decline in the mortality. In England and Wales, in 1884, 186 women per million living died of puerperal sepsis; in 1907 only 81 per million. In Ireland, in 1884, the septic death-rate per 1,000 births was 2.57; in 1907 it was 1.60. It is interesting to note, too, how in the last few years the progress is as marked as at any previous part of the period under review. Sir John Byers is able to show, also, by what steps puerperal sepsis is avoided—cleanliness, restraint from interference, and immediate attention to lacerations. We regret we cannot follow Sir John through the whole of his encouraging address. He has a message for the present, as well as lessons from the past, and we think him right in believing that the treatment of puerperal sepsis lies in the future in the hands of the vaccinists, rather than of the surgeons.

#### "Vicarious Philanthropists"

MUCH has been said in the last year or two in medical circles of the "vicarious philanthropist," who is so ready to exploit the medical man for the good of the community. We are glad to see that a very sensible clergyman, the Rev. H. D. Murphy, of St. George's Church, Belfast, took the opportunity of the recent meeting of the British Medical Association to utter some home truths on this subject to his parishioners. He chose as his text a too little-known passage from the Apocrypha:—"Honour a physician with the honour due unto him, for of the Most High cometh healing, and he shall receive honour of the King."

The skill of the physician shall lift up his head, and in the sight of great men he shall be in admiration. There is a time when in their hands there is great success." This is so excellent, we can only regret it is not in the canonical Scripture. Starting from this text, Mr. Murphy spoke seriously and eloquently of the shameful dishonesty with which medical men are often treated by those in their debt for life itself. We know no more fitting sermon with which to anticipate a meeting such as that at Belfast.

## PERSONAL.

MR. SYDNEY SCOTT, M.S., has been appointed Surgeon for Diseases of the Throat and Ear at the National Hospital for the Paralysed and Epileptic, Queen Square.

DR. DUDLEY BUXTON has been appointed to the recently created post of Lecturer in Anæsthetics at the Royal Dental Hospital, London.

THE Royal Boscombe Hospital, Bournemouth, has received an anonymous gift of £4,000 to defray the cost of erecting a ward for children.

AT Swansea Assizes Dr. Howell Thomas Evans, of Monmouth, claimed damages from the Great Western Railway for personal injuries, and was awarded £3,500 damages and costs.

WE regret to announce the death of Dr. Gustav Christ-Lott, Senior Physician to the Gynæcological Department of the Polyclinic at Vienna, and Professor of Gynæcology in the University.

A HANDSOME monument has been erected in the cemetery of Chard, Somerset, over the grave of the late Dr. Benjamin Powne, by members of the friendly societies of Chard and district.

LORD SANDHURST, Treasurer of St. Bartholomew's Hospital, has received from the Worshipful Company of Skinners the sum of £200, being the first instalment of a grant of £1,000 towards the capital fund of the hospital.

DR. EMRYS-JONES has been appointed by the Home Secretary to act for a further term of five years as medical referee in all ophthalmic cases for county court circuits No. 5, 7, and 8, which comprise most of the large towns in Lancashire and Cheshire.

DR. WILLIAM SAVAGE has been appointed Medical Officer of Health and Chief Medical Inspector of Schools for the County of Somerset, in succession to Dr. Stevenson, appointed Superintendent of Statistics at Somerset House.

DR. W. BEVAN LEWIS, Medical Superintendent and Director of the West Riding Asylum, Professor of Mental Diseases in Leeds University, has been elected President of the Medico-Psychological Association of Great Britain and Ireland.

AT a recent meeting of the Managing Committee of Jervis-Street Hospital, Patrick T. McArdle, M.B., B.Ch., B.A.O., R.U.I., Assistant Master to the National Maternity Hospital, Holles Street, Dublin, was appointed Gynæcologist to the hospital.

MISS IVY E. WOODWARD, M.D.Lond., having passed the required examinations, was admitted, at the last comitia of the Council of the College, a member of the Royal College of Physicians of London. Miss Woodward is thus the first female student admitted to the membership of the College.

THE Vice-Chancellor of London University, Professor M. H. M. Hill, has appointed Dr. A. D. Waller, M.D., LL.D., F.R.S., Director of the Physiological

Laboratory, to represent the University at the inauguration of Dr. A. L. Lowell as President of Harvard College on October 6th and 7th.

PROFESSOR HARVEY CUSHING, M.D., of the Johns Hopkins University (U.S.A.), delivered the fifth William Mitchell Banks Memorial Lecture on Wednesday last, in the surgical theatre of the Medical School of the University. The subject of the Lecture was "Recent Observations on the Pathology and Surgical Treatment of Intra-cranial Tumour." There was a large gathering of medical men and students.

THE most interesting episode in connection with the meeting of the British Medical Association was the admission of the Countess of Aberdeen to the membership of the Association. No higher honour is it in the power of the Association to bestow, and under the circumstances the tribute to the work which her Excellency has accomplished in the anti-tuberculosis campaign inaugurated by her in Ireland is unique.

DR. BREINL, of the Liverpool School of Tropical Medicine, formerly assistant to Professor Chiara, Prague, has been nominated to the directorship of the newly-founded School of Tropical Medicine in Western Australia. He is chiefly known for his researches regarding sleeping sickness. Dr. Breinl joined the Liverpool School of Tropical Medicine in 1904, and was appointed shortly afterwards to proceed to Manaoas on the School's Yellow Fever Expedition.

MR. ERNEST FREDERICK SCHIFF, of Carlos Place and Warnford Court, has presented, through Mr. Mayo Robson, to the managing committee of the Home of Recovery, of which H.R.H. Princess Louise is president, the sum of £100,000. This announcement was made public on the anniversary of the death of Mr. Alfred George Schiff, the brother of the donor, in whose memory the gift has been made. The Institution will be called "The Schiff Home of Recovery."

A REPORT by Professor Karl Pearson was presented at a meeting of the Senate of London University, which shows the progress of the work of the Francis Galton Laboratory for National Eugenics during the past 16 months. The Senate have voted thanks to Sir Francis Galton for a further donation of £500 for the maintenance of the laboratory, and recorded their high appreciation of the services rendered by Professor Pearson. Mr. David Heron and Miss E. M. Elderton have been reappointed respectively Galton Research Fellow and Galton Research Scholar for a year from next February.

AT a meeting of the Curators of Patronage of the University of Edinburgh, on July 29th, Lord Provost Gibson presiding, the vacancy in the Professorship of Anatomy was filled by the appointment of Professor Arthur Robinson, M.D., C.M., Professor of the same subject at Birmingham University.

THE new Professor is a graduate in Medicine of the University of Edinburgh, where he obtained the degrees of Bachelor of Medicine and Master in Surgery in 1883, graduating with honours. In 1890 he proceeded to the higher degree of Doctor of Medicine, and was awarded a University gold medal.

IN 1896 Professor Robinson was appointed lecturer on Anatomy in the Middlesex Hospital Medical School. Whilst holding that appointment he entirely reorganised the Anatomical Department, supervised the erection of new buildings for its accommodation, and placed it, as regards adaptability to, and efficiency for, its purpose, in a position second to no other Anatomical Department in London. In December, 1900, Professor Robinson was appointed Professor of Anatomy in King's College, London. In December, 1904, he was elected to the chair of Anatomy in the University of Birmingham, and in 1905 was appointed Sub-Dean of the Medical Faculty. In the summer of 1903 he was appointed Hunterian Professor by the Council of the Royal College of Surgeons of England.



# A CLINICAL LECTURE

ON

## ADENOIDS: SOME CAUSES FOR THEIR ENLARGEMENT AND REASONS FOR THEIR REMOVAL.

By HORACE LAW, M.D., F.R.C.S.,

Surgeon to the Throat Department, Adelaide Hospital, Dublin; Consulting Throat and Ear Surgeon to the Stewart Institution.

PROBABLY the two most common questions propounded by the anxious parent of a child after a verdict of "adenoids" has been given are: "Doctor, what causes them?" (adenoids), and "Why is it necessary to remove them?" I propose to attempt in this lecture to give an answer, which, if lacking in completeness, at any rate, sums up the position fairly.

In the first place, let us try to discern why, in these days of scientific knowledge, the growth of adenoid vegetation in the naso-pharynx should be far commoner than in the days of our fathers, for, in spite of the fact that in days gone by the presence of adenoids was not suspected, we can hardly gainsay the fact that if they had been as prevalent then as they are now, they would not have remained undiscovered. The conclusion, then, is that they are indeed more common now than formerly. Had the answer to the above question to be given in one word, I should say, "civilisation." In what way does our present mode of life differ from that of our forefathers? Mainly in the intensiveness with which everything is done, and the hurry and haste of life. While this is mainly true of adults, it reacts on child life also, and, beginning with the infant, we can enumerate some of the direct causes which can best be summed up in the statement, that anything which will produce congestion or stagnation of blood will tend to produce hypertrophy, coupled with chronic congestion, and all the causes to be mentioned appear to me to act in this way. I purposely omit here all references to deformities of nose, etc., as they obviously would produce congestion, etc.:-

1. The habit of many mothers of not feeding their own child by the breast. This contributes in two ways: the first, that the artificial food cannot be as good or as suitable as the natural milk, and, secondly, that the mechanical act of sucking is different with a long india-rubber teat from that at the breast. If the teat has too big a hole, the infant feeds too fast and has to be checked by allowing a partial vacuum to form in the bottle, or if the hole be too small the force necessary to extract the milk is too great; either way it is hardly likely to be right.

2. Following on the above, the great temptation to use a comforter—an abominable instrument, against the use of which nothing too strong can be said.

3. The next stage will be when white bread is given, from which the most necessary elements have been removed, and perhaps a good dose of alum added to make it white; the flour used for biscuits, rusks, etc., has the same drawbacks. A great deal has been said upon this subject which I need not enter into here.

4. Later on studies begin, and the anxious parent allows the child to be pressed on to compete with others; and truly, also, the child, eager to excel in competition, vies with its fellows, till exhaustion and congestion are added to an overstimulated nervous mechanism. Here I must add a word about school hours and feeding. This only

applies to day schools, and more especially girls' schools. The little one is given its breakfast at 8 a.m. to 8.30 a.m., as the case may be; a little packet of lunch, so-called, is made up, and off goes our fast-growing youngster to battle with its lessons from 9.30 onwards; a short interval is allowed about 12 for lunch, and then to work again till 1.30 or 2 perhaps. Then school hours are over, and our youngster starts for home, having attempted what should be a day's work in a few hours. The various distances to home means a dinner-hour as late as three in some cases, and the principal meal of the day is postponed until, over-tired, with hunger gone, our little friend cannot eat what is put before it. The above is absolutely accurate of some cases I have had under my care, or I would not have dared to write it down. The other causes to be enumerated apply over the whole range of child life.

5. Frequent infection with ordinary colds (acute rhinitis), by contact with others suffering from this disorder, owing to overcrowding, collection of children into crowds, as at school, &c.

6. The various infective fevers passed on in the same way as above-mentioned.

7. Bad air. This includes a variety of causes, from town life to escapes of coal gas. Naturally, the town dweller is at a serious disadvantage here, even if we allow for the fact that the country cottage is badly ventilated at night, as the door is the principal opening for ventilation, and is shut tightly when the family retires to rest.

8. A vitiated atmosphere, due to too many sleeping in the same room, or to gas burning without proper exit for the burnt products, or to a badly-drawing grate allowing smoke, etc., into the room, or to slight leaks in the gas connections, so small as to be unnoticed by smell, and, lastly and worst of all, sewer gas from bad drains. One could enlarge on the above, but enough has been said to indicate the direction in which we should look.

9. Adenoids certainly tend to run in families, but the actual cause may be one of those mentioned above, and not a genuine hereditary taint.

10. A damp room or house, or even the emanations from a damp basement or cellar under the house, seems to have a detrimental effect on the general health, and should be considered, at least, as an indirect cause.

The second of our main questions is concerned with the reason for operation to remove the growths, and it may be confidently stated that we do not remove adenoids merely because they are enlarged, but because of their various sequelæ. These resulting changes and disorders may be divided into those which have their seat locally, and those affecting the general system. One or more may be present in any given case, though it is most usual to find several associated together in varying severity. The local manifestations are: deformities of the upper jaw and septum of the nose, hoarseness and involvement of the tonsillar tissue in the hypertrophy, and, finally, ear troubles, which consist in acute and chronic catarrh and

suppuration, with all their accompanying train of woes. There has been much discussion about the deformities of the upper jaw leading to a highly-arched palate and narrowed alveolar arch, with consequent overcrowding of the teeth and protrusion of the incisors. The bending-up of the hard palate naturally causes a shortening of the distance between the septal processes of the superior maxillæ and the hard bone of the frontal and body of sphenoid, and thus leaves too little room for the nasal septum, which, perforce, must bend or break to accommodate itself to the insufficient space. Thus the mechanism of the production of deviated and otherwise deformed septa is explained. How far all this should be laid to the door of enlarged adenoids is hard to say, but the fact remains that adenoids are usually present in these cases, and if they be removed early enough before the bones have become too firm and set, a considerable improvement in the development of the jaw may be expected, so that for practical purposes the removal of the mass of adenoids is to be confidently recommended. Chronic rhinitis with hypertrophy seems to be a later result, and rarely is present to any extent in children under eight years of age, but in direct proportion as the age advances the likelihood of hypertrophic changes being found in the nose increases, till, in cases where the adenoids have been suffered to remain to the age of from fourteen upwards, the probability is that steps will have to be taken to deal with this hypertrophy after the removal of the adenoids, if the case is to have a successful issue.

Hoarseness in children is not, as a rule, a result of adenoids, though it is sometimes noted in these cases. By far the larger number of cases of chronic persistent hoarseness that I have seen are not associated with adenoids, or, if the growth is present, its removal has no beneficial effect on the voice. By far the most serious complications are found in the ears; few children get acute or chronic catarrhal or suppurative otitis who have not enlarged adenoids, and how many cases of measles and scarlatina who have adenoids present escape without involvement of the ears?

Most, if not all, children suffering from adenoids show changes in the tympanic membranes, due to obstruction of the Eustachian tube, though these may not have caused noticeable deafness, or, at most, a little deafness with each cold. Nearly all these catarrhal cases do well after operation, though it often takes a long time before the drums regain their normal position and appearance. Every child suffering from chronic suppurative otitis media should be examined for adenoids. A case in my practice illustrates this very well. A fine healthy girl, æt. 6½, was brought to me with a discharge of pus from one ear; a little perforation was seen and a small quantity of adenoids found and removed. The ear dried up almost immediately, and three weeks after the operation the child got scarlatina, which was of a fairly severe type; notwithstanding this, no return of discharge from the ear was observed. No one can trace the possibilities of harm due to suppurative ear trouble, for not alone is the hearing power in question, but the very life of the patient may be placed in the gravest jeopardy.

Now, in dealing with the results to the general system of the presence of adenoids, we may mention general delay in development, and debility with liability to catch cold, often followed by more serious chest affections, to wit, bronchitis, tuberculosis, &c., maldevelopment of the chest walls, mental apathy and inattention to lessons, and such

reflex troubles as cough, enuresis, &c. Here, again, it will be right to mention that the mere size of the adenoids is not necessarily an index of the amount of the consequent damage, as often a small piece of adenoids, which has become inflamed and infected with micro-organisms of various kinds, sets up more trouble than a larger growth in a quiescent state; and, further, there are many cases which in the prone position allow of complete obstruction to nasal respiration, due to the congestion of the otherwise slightly hypertrophied adenoids, which, when examined by day in the upright posture show but little enlargement. In cases, brought because of some general as well as local manifestation, it is important to remember that a very small piece removed may effect a most excellent cure. The fact that there is not much to remove, while the troubles of our little patient are clear and unmistakable, is no bar to a brilliant result after operation, as the following cases show:—

1. A little girl, æt. 4½, who had suffered for two months from almost continuous bronchitis (she was hardly out of one attack till she began another), was seen by me in consultation, after all other means had failed. She breathed through her nose when asleep, but discharge of mucus from the nose and throat was noticed. I found a small quantity of adenoids and very easily removed them. This was done in the month of November, and she passed the subsequent winter with only one slight cold.

Two boys, brothers, æt. 11 and 10, got, without apparent cause, colds with high temperature at frequent intervals, so much so that their education was interfered with; again, they breathed through their noses fairly well. Removal of a moderate amount of adenoids completely stopped these feverish attacks.

The above three cases may be taken as representing cases where the mass of the adenoids contains infective material, which only awaits some insignificant cause to light up into fresh activity. In this category I could mention many cases of purulent discharge from ears, cured in a short time by the same operation. In cases where marked delay in development is found, usually the quantity of adenoids is much greater, and therefore the diagnosis easier; but a comparatively small increase in size, especially where congestion is superadded, causes much mental apathy, and leads to bad school reports and opportunities lost which can never be recovered. It is most interesting to get the school reports of a youngster after the operation, and nine times out of ten the reports, previous to treatment, speak of our little patient as bright and intelligent, but very inattentive, while the subsequent ones dilate on the marked improvement in attention and application. The other general conditions and reflexes speak for themselves, provided the possibility of adenoids as a cause is remembered.

Our subject does not permit of a discussion on the methods of operation, but I merely give, as my personal opinion, that I consider gas and ether the ideal anæsthetic, the recumbent position with the head over the end of the table the ideal position, and early removal after the signs of trouble are observed as the ideal time.

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NOTE.—A Clinical Lecture by a well-known teacher appears in each number of this journal. The lecture for next week will be by Prof. Albert Hertz, M.D., University of Vienna. Subject: "Acute Leukæmia."

## ORIGINAL PAPERS.

## SOME INTERNAL DERANGEMENTS OF THE KNEE-JOINT. (a)

By ALBERT CARLESS, M.S.LOND., F.R.C.S.,

Professor of Surgery in King's College, and Surgeon to King's College Hospital; Examiner in Surgery to London University, &amp;c.

It is just over a century since William Hey, of Leeds, first published his description of this type of injury in his book, entitled "Practical Observations in Surgery, Illustrated by Cases," which appeared in 1803, and a second edition of which was issued in 1810. It was a subject that naturally interested him keenly, inasmuch as, at the age of 37, when he was in full practice, with many operations to undertake and much responsibility resting on him, he was for a while laid aside entirely from active work for some months by an injury to his knee, from which he never recovered fully. Five years later he received a blow on the thigh of the weak limb from a horse which disabled him so completely for a time that he was doubtful as to ever regaining the power of walking. After spending four months in London, Bath, and Harwich, seeking help and health, he returned to Leeds in splendid physical health, but hopelessly lame as to the knee, and from henceforth for the forty remaining years of his life he was unable to walk without a crutch except across a moderate-sized room, whilst to stand unaided for more than a few minutes was impossible. He could ride in the town for a short way on horseback, but usually he drove everywhere. No wonder, then, that all injuries to the knee attracted his keen and discriminating attention, and the extent of his practice gave him ample opportunity of seeing many such cases. In the paper included in his surgery he refers only to four patients, but mentions that others had been seen by him. In all the cases described, one of the semilunar cartilages had apparently been displaced for some time, and had remained "out," so that the power of locomotion had been seriously impaired. He treated the cases by flexing and extending the limb forcibly, and this usually brought about a restoration of the normal position of the cartilage. Hey himself does not seem to have appreciated exactly what happened in these lesions. His own description is as follows:—"The complaint which I have described may be brought on, I apprehend, by any such alteration in the state of the joint as will prevent the condyles from moving truly in the hollow formed by the semilunar cartilages and articular depressions of the tibia. An unequal tension of the lateral or cross ligaments of the joint, or some slight derangement of the semilunar cartilages, may probably be sufficient to bring on the complaint. When the disorder is the effect of contusion, it is most likely that the lateral ligament of one side of the joint may be rendered somewhat more rigid than usual, and hereby prevent that equable motion of the condyles of the os femoris which is necessary for walking with firmness."

Sir Astley Cooper, writing in 1831 in the fifth edition of his "Treatise on Fractures and Dislocations," speaks appreciatively of Hey's work, and mentions that he had sent cases up to Leeds to be treated by him. He describes the causation most accurately. "The injury," he says, "most frequently occurs when a person in walking strikes his toe with the foot everted against any projection (as the fold of a carpet), after which he immediately feels pain in the knee, which cannot be completely extended. I have seen this accident also happen from a person having suddenly turned in his bed, when, the clothes not suffering the foot readily to turn with the body, the thigh-bone has slipped from its semilunar cartilage. I have also known it occur from a sudden twist of the knee inwards when the foot was turned out." In contradistinction to Hey, Cooper attributed the lesion to laxity of the ligaments passing from the tibia to the cartilage. He also emphasised the fact that repeated displacement may produce what he calls chronic rheumatism, and describes a case in which the ana-

tomical conditions were identical with those which we now describe as characteristic of chronic traumatic arthritis.

From this time onward little progress was made in the recognition and accurate study of this condition until Listerian methods enabled us to open knee-joints safely and ascertain in the living subject what was the actual cause of the various derangements met with in practice; it is now obvious that many and various lesions may interfere with the equable movement of the joint, and that in several of them no hope can be entertained of improvement apart from operation. Increasing indulgence in athletic exercises of various types, such as tennis and football, particularly the Association game, makes the number of cases now coming under observation probably larger than ever before, and it is essential that a clear idea be obtained of the various possible causes of such derangements, and that the practitioner should be able to differentiate those which require operation from those in which other measures may be relied on.

For the clear comprehension of these cases it must ever be remembered that the anatomical arrangements of this joint are somewhat peculiar. No articulation in the body is more exposed to stress and strain from the combined influences of the weight of the trunk and the necessity for speedy and effective locomotion, whilst all sudden movements, such as jumping, twisting, etc., impose heavy calls upon the stability of this part. And no articulation in the body is less suitable to withstand such strains, from a *prima facie* view. The lower end of the femur is formed of two rounded bodies separated by a deep sulcus, except in front; the upper end of the tibia is practically convex from side to side, and these two awkwardly shaped surfaces have to be kept in apposition by ligaments. The convex end of the tibia is fitted to the lower extremity of the femur by the intervention of the semilunar cartilages, which not only form a shallow cup for the femoral condyles to rest in, but also constitute a buffer for the distribution and diminution of shock. Necessarily, the ligaments of the joint are of great strength, and peculiarly arranged so as to prevent rotation or lateral movements, which would be undesirable. The patella protects the front of the articulation, and by fitting closely between the femoral condyles in the inter-condyloid groove assist in giving stability from lateral and rotary strains. A certain amount of unoccupied space necessarily results from such a disposition of the parts, and this is filled in by fatty pads, which, however, occasionally become a source of trouble and inconvenience, and must be included amongst the possible sources of internal derangement.

One of the most troublesome affections of the knee, from the point of view of treatment, is what is known as a Simple Sprain, that is to say, a lesion due to rupture of some of the ligaments. These are of almost everyday occurrence, and the internal lateral ligament is naturally that which is most often involved. The fact that the upper ends of the femora are displaced outwards, in order to allow of the interposition of the pelvis between them, explains that in the erect posture there is always a certain element of strain upon the internal lateral ligament; and hence it is essential that when it is torn or injured extra care be taken in order to restore it to a state of functional perfection. An accident of this type is usually followed by a traumatic synovitis, in which there is an abundant blood-stained effusion, and the part becomes hot and painful. The patient is generally put to bed and the limb kept at rest. Perhaps an ice-bag is applied or a wet bandage, or, in some cases, fomentations are employed. It is a matter of comparative unimportance as to whether the practitioner relies on heat or cold, so long as the joint is kept at rest. Improvement follows within a comparatively short time, and then arises the difficult question as to when movement should be allowed, or the patient permitted to get up. Only too frequently the patient is allowed up too soon, and often the result is a repetition of the injury and a recurrence of the synovitis, whilst the spot of localised injury where the ligament is torn becomes very decidedly tender. On the other hand, cases are well-known in which the part is kept at rest too long, and adhesions form within the joint, which sometimes have not been recognised

(a) Paper read before the Ealing Branch of the British Medical Association, April 7th, 1909.

or treated until the patient has submitted himself to the tender mercies of the bone-setter.

It is, therefore, necessary to steer a clear and consistent course between these two possible dangers—too much rest, and too much movement. Be it remembered clearly, that rest by itself of an articulation never leads to immobility or stiffness, unless some abnormal pressure is exercised on the articular surfaces, or inflammatory troubles are present. When, however, a patient is permitted to walk about on an immobilised joint, or if there is some solution of continuity of the synovial lining membrane, then adhesions are only too likely to follow, and stiffness to result. Most of the troubles arise from non-recognition of the fact that whilst movement after a very short time does no harm to a joint, but rather does good, weight-carrying is harmful. In the treatment of a sprained knee, where there has been serious ligamentous lesion (and the same holds good after an operation in which ligaments have been divided), three stages must be included: firstly, absolute rest both from movement and weight-bearing; next, freedom of movement for the joint, but without weight-bearing; and finally, the patient is allowed to walk. The second stage is the important one that is only too often omitted. The patient should be allowed to move his leg in bed freely; massage is ordered, and the limb well worked, and subsequently, when this causes no pain, exercises against resistance are performed, whereby the ligaments are habituated to strain, which is regulated either by the use of a weight over a pulley, or by the educated muscles of the rubber. When at length the ligaments are obviously knit together firmly, the weight of the body can be well borne, and no harmful after-effects arise from the weight of the trunk being once more placed on the limb.

The most serious of all ligamentous lesions in the knee is Rupture of the Crucial Ligaments, fortunately a very rare occurrence, but one that has now been recognised in a few cases and dealt with effectively. Obviously they are torn more or less completely in all dislocations of the joint, but with care they may be repaired almost perfectly, although considerable trouble will need to be exercised in order to prevent any subsequent laxity on the one hand, or undue stiffness on the other. Movements with massage will be required for a considerable period of time, and the limb must be kept stiff in the intervals, probably for five or six weeks; then a support will be required, which will only allow of slight movement to begin with, but by the filing away of a stop, the range of movement can be gradually increased, and thus undue strain will not be placed on the ligaments too early.

Apart from complete dislocation, rupture of the crucial ligaments will be indicated by the existence of a to-and-fro antero-posterior movement of the tibia on the femur, or by free lateral mobility, perhaps of the rocking type, or by unnatural rotation. This is associated in the early stages with great pain and a sense of serious insecurity. If diagnosed early, treatment may be undertaken by opening the joint freely and stitching together the ligaments. This has been successfully accomplished in a few cases. It is quite a question whether much good would come of such a procedure in an old-standing case.

The true internal derangements that are likely to require operation are connected either with the semilunar cartilages, the articular cartilages, or the fatty pads, which, as already mentioned, fill up spare corners in the joint cavity. Of course, the semilunars preponderate enormously in the frequency with which injury occurs and operation is needed. Out of 25 operation cases which I have collected, the semilunars were affected in 22 instances, the articular cartilages in two, and the fatty fringes in one, and this about represents the proportion found in any series of cases.

In all the symptoms may be more or less alike, and it is only by the most careful investigation and scrutiny that a differential diagnosis can be reached, whilst in many cases this will be an impossibility apart from operation. The patient usually complains of a sense of weakness, and perhaps of pain. He feels insecure, and the joint not unfrequently gives way under stress. In some instances he merely complains of a recurrence of pain and swelling when he exposes

the joint to work or effort. There may be a tender spot, and the practitioner must investigate carefully as to the exact situation of the tenderness, whether on the joint line or above it. Crepitus may be obtainable, and the situation where it is produced, whether femoro-patellar or femoro-tibial, must, if possible, be ascertained. There may be difficulty in straightening the limb, or inability through pain to stand when it is straight. The most characteristic feature is a sudden painful locking of the joint, usually in a semi-flexed position, and the cessation of this fixity may be accompanied by a sensation of something slipping into place once more. On careful examination the joint may appear to be natural in outline and size, or there may be some swelling. The movements may be free and painless, or limited, and with some degree of pain. It is important to ascertain whether or not fluid is present, and then attention must be directed to the margins of the articular cartilages, to the semilunar cartilages to ascertain whether or not they are movable on flexing and extending the limb, and to the synovial membrane. A most important element in the examination is the question as to the existence or not of abnormal mobility—whether there is any abduction or adduction present, whether the joint is firm in an antero-posterior direction, and whether or not rotation exists. When the knee is flexed, some degree of external rotation is always possible, but internal rotation is absolutely precluded if the crucial ligaments remain intact.

(1) The fatty pads which exist in the joint are occasionally a source of painful trouble. The chief of these pads is that which is known as the ligamentum mucosum, and is situated beneath the ligamentum patellæ, extending backwards as far as the anterior crucial ligament. The margins of this pad on either side are more or less irregular and fimbriated, constituting, according to some authorities, the ligamenta alaria. In addition to these, however, there are to be found in most joints certain tabs or localised masses of fat situated beneath the synovial membrane, and placed above, below, or to the sides of the patella. They are quite irregular in their distribution, but they are not at all uncommon.

Several modifications of these masses are now known to constitute causes of internal derangement.

(a) A patient may suffer from the result of a hæmorrhagic effusion into this tissue, the consequence of a sprain. Thus a man playing football sustained an injury which gave him the sensation as of something opening on the inner side of the knee, which became stiff, but was not "locked." He was able to flex and extend it to some degree. When seen a fortnight later he was complaining of pain, and some amount of tenderness on the inner side of the patella, reaching back along the top of the tibia. There was some general swelling of the joint, increased on walking. Distinct crepitus was obtainable on the inner side of the patella, but no lateral mobility and no displacement of the cartilages when the limb was moved. In this case there was probably a hæmorrhage into the fatty tissue, together with a sprain of the internal lateral ligament. Treatment consisted in massage and exercises against resistance, and was quickly satisfactory.

(b) A little more trouble in this direction will result in the fatty tissue becoming thickened and fibrous; some adhesions may form, so that the patient cannot put his weight upon the limb, complete extension of which becomes impossible. Attempts at walking are likely to lead to recurrent attacks of synovitis, and but little good follows from all the varied methods of treatment that are sure to be employed. There is little that is very characteristic in this form of trouble, but the impossibility of extending the limb fully, and the absence of mobility of the cartilages or of tenderness along the articular line or of the characteristic locking of the joint should be suggestive.

(c) Still another condition associated with these fatty masses is overgrowth to such a degree as to constitute definite swellings on either side of the patella, and these may extend backwards into the joint so as to interfere with the comfortable use of the articulation. The clinical history of such a case has been described

as follows:—The patient meets with an accident in the form of a direct blow or an indirect injury to the knee, which produces severe pain. The joint is, however, not markedly swollen, as a rule, and the pain soon passes off with suitable treatment. The pain returns in attacks generally on the inner side of the joint. The difficulty in flexing or extending the leg varies in different cases. On examining the joint in this later stage one finds that there is a swelling below and on both sides of the patella. This swelling is elastic, and presents pseudo-fluctuation, and the patella floats. The joint is free, and there are no tender spots in the space between the femur and tibia. Treatment consists in the removal of the fatty masses usually by an incision on the inner side of the patella.

A condition somewhat similar to the above, and requiring to be differentiated from them, is that in which the joint is occupied by villous growths of a fibro-papillomatous type, the result either of a simple chronic synovitis or of a chronic osteo-arthritis affection. In this there is usually a considerable degree of effusion, and the trouble may have arisen apart from injury. There are frequent attacks of pain due to the nipping of the villous growths between the bones, and not unfrequently these can be felt and rolled under the finger. There may also be some other evidences of articular disease, such as lipping of the margins of the articular cartilage when osteo-arthritis is present. The treatment of this condition is troublesome and questionable. Under all circumstances the routine method of counter-irritation and improvement of the general health may be tried, together with local pressure and support. Failing this, it may be justifiable to lay the joint open and excise the portion of synovial membrane from which the fringes are derived, usually in close contact with the patella; failing this, excision of the joint may have to be considered.

(2) The semilunar cartilages constitute far and away the commonest cause of internal derangement of the knee-joint. They consist of fibrous tissue covered by articular cartilage, and are attached by their margins to the capsule of the joint; their extremities are fixed to the upper surface of the tibia in front of and behind the tibial spine, the horns of the outer cartilage being placed within the grasp of the extremities of the inner. The inner cartilage is much more often affected than the outer, owing to the fact that external rotation is more likely to occur than internal, and it is the inner cartilage which is exposed to strain in this position. Out of 25 cases of which I have notes, in 21 instances the inner cartilage was involved, in 2 the outer, and in 2 both were so affected as to require removal.

The causation of the injury varies somewhat, but is usually in the nature of a sudden strain or wrench in the flexed position of the limb, to which is superadded some element of rotation. In the football field the accident is not uncommon, the patient slipping or falling violently, and the foot being twisted out at the same time. Sometimes the onset is more gradual, and before any acute displacement occurs there is a history of painful catches in the joint, which are easily put to rights, and may or may not be followed by some synovial effusion. In one case the trouble was evidently due to the rapid growth of the lad, and to ligamentous relaxation. In running and jumping pain of this type occurred, but the trouble was kept in check merely by the use of elastic knee supports. Similarly chronic relaxation of the joint from some affection such as osteo-arthritis may lead in time to displacement.

The character of the injury inflicted on the cartilages varies somewhat, but, for descriptive purposes, may be classified as detachment or loosening, rupture, complete or partial, and bruising. The last of the three will be dealt with separately.

*Detachment and rupture* are frequently associated together. Out of 16 instances of this type of injury, 7 might be looked on as being in the nature of detachment or loosening, whilst in 9 cases the cartilage was torn or split, and perhaps, in addition, loose. The anterior end of the cartilage is much more frequently involved than the posterior owing to the looseness of the capsule in this position, and this will explain why in so many instances the chief pain is to be experienced

close to the inner border of the patella. Rarely is the cartilage completely detached, although that injury is known.

When the cartilage is torn, the rupture may be transverse or longitudinal. In the former instance the two halves may become united again by cicatricial tissue, but the cartilage is henceforth likely to be somewhat loose owing to some increase in length, or it may be fixed to the tibia by adhesions, and pain may result when pressure is placed on it. When the split is longitudinal, the fragment remains attached posteriorly, and its anterior end is loose, being sometimes doubled over backwards, or the free end may even become adherent in the middle line in the inter-condyloid notch of the femur.

The clinical history is a fairly obvious one, but varies a little according to whether the initial injury is sudden or the trouble comes on more gradually. In the former the patient falls to the ground as the outcome of the injury, and realises by the pain that some serious lesion has occurred to his knee. Probably the joint is locked so that he cannot bend or straighten it, and in this condition it may remain for some time, when it may be reduced spontaneously, or surgical assistance may relieve him of the trouble. On examination it will probably be found that some irregularity in outline at the upper end of the tibia is present. The longest time that I have known such a condition persist without reduction was 24 hours, and then the reduction occurred spontaneously, whilst the patient was hobbling about in the street. A sudden snap in the knee relieved the patient from her pain and set the joint free. If such a case with the limb fixed comes under observation, the correct treatment consists in forcible flexion of the limb, perhaps under an anæsthetic, and then in extension, and this manœuvre may be repeated once or twice. As a rule it is immediately successful, as Hey pointed out in his original paper.

The accident will be followed by an attack of sub-acute synovitis with a good deal of effusion, and for this the limb must be kept at rest. As soon as the effusion has disappeared, the limb should be put up in plaster-of-Paris and kept thus at rest for at least three weeks, so as to allow the injured ligamentous attachments of the cartilage to consolidate. At the end of this time massage and exercises against resistance must be instituted, so as to restore the limb to full functional utility, and no strain on the limb, as by athletic exercises, dancing, tennis, etc., should be permitted for another three months at least. In this way it may be possible to obtain a good result without recurrence of the trouble.

If, however, these precautions are neglected, then almost certainly recurrence will follow sooner or later, when the limb is once again exposed to some undue strain. Gradually the intervals between these attacks become shorter; less violence is required to bring about displacement, and the limb becomes more and more weak, and the patient less and less secure in his gait. On examination it will usually be found that there is some thickening of the synovial membrane, together with a point of tenderness near to the patella in the inter-articular line, and on flexing the joint the cartilage may be felt to shift its position, becoming more or less prominent according to circumstances. There is often also some lateral mobility at the knee which is obviously less firm than usual. Under such circumstances, with a history that dates back for some months or years, it is useless to waste time in rest, blistering or other forms of treatment.

In a few cases where the cartilage slips forward, it is possible to control it by means of a support somewhat of the nature of a truss, which consists of two suitably shaped pads which fit on either side of the patella, and are held together by a spring which passes round behind the knee. In patients who live quiet lives this will suffice, although it must be remembered that such a contrivance must be worn day and night, for turning over in bed is not an unfrequent cause of displacement. More frequently, however, operation is to be considered as not only the best, but sometimes the only method of giving relief to the symptoms, and under modern aseptic precautions the patient may be promised a satisfactory result in a short time.

In other cases the onset is more gradual, and may be associated with chronic synovitis, which allows the cartilage to become loosened, and then if some lateral or rotary strain is thrown upon the joint, the cartilage may slip out of place. When once the process has commenced, the story runs on in the same way as outlined in the more acute cases mentioned above.

As regards the character of the operation which is undertaken, but little need be said. The most minute precautions must be taken as to asepsis, and the joint opened on the side where the pain is experienced. Formerly efforts were made to fix the cartilage down to the bone by stitches which passed through the periosteum, and sometimes the cartilage was divided transversely, and the two halves drawn out and thus fixed. It has, however, been demonstrated by experience that these measures are seldom necessary, and that it is wiser to remove the cartilage, or at any rate the loose or detached portion of it, completely. If care is taken to ensure a suitable period of rest, and to follow healing of the wound by massage and exercises against resistance, it is wonderful how strong the joint quickly becomes, and how completely the absence of the cartilage is compensated for.

The removal of both cartilages is another matter, however, and although I have undertaken it once, I cannot say that I was happy with the result, and certainly one will make every effort not to be forced to do so again. The knee necessarily must become "wobbly" with considerable lateral rocking, and in one case to which I have been able to refer, in which the operation had been performed some years previously, a condition of chronic arthritis had supervened which was painful and troublesome.

(... Since this paper was originally written, the case referred to here has been seen again. The patient was a lad of about sixteen, of stunted stature, and there was a typical history with pain on both sides of the joint, which could only be bent or straightened with a jerk, evidently due to the displacement of some considerable body. Both cartilages were loose, and one was torn and much thickened and distorted. Both were therefore excised through two lateral incisions. When healing had occurred, the joint was found to be very loose, with considerable lateral rocking. A hinged splint with firm iron lateral supports was ordered, and after a while the patient was able to get about quite freely and easily, and the amount of lateral rocking had diminished considerably. . . .)

*Bruising* of the cartilages is also known to occur, although it is not common, but I have come across at least two cases of it. In one a clergyman, aged 45 years, a heavily built man, indulged in running and jumping during his honeymoon, an exercise which was somewhat unusual to him, and certainly injudicious. He hurt his knee, apparently not from a fall or slip, but from the jar of a jump over or from a wall. At first it did not give him much trouble, but subsequently he suffered from recurrent attacks of synovitis, with some little effusion, a good deal of swelling, and some pain and tenderness, especially on the inner side of the patella. On examination some months later, after he had been under various forms of treatment, I found that the inner meniscus was decidedly palpable and tender, and seemed to project a little forwards on flexing the knee.

A second case came under my observation twelve months ago. It occurred in a schoolmaster, aged 29 years, as the outcome of an accident during a game at football. He hurt his knee, but played on, and found the limb stiff and painful the next morning. It remained a little swollen and painful for a few days, but there was apparently no effusion. Here, too, there was tenderness on pressure over the external cartilage, resulting in difficulty in extension.

The special features of such cases as these are that the accident is not associated with locking or fixation of the joint, and is not necessarily due to a rotary strain, but rather to the crushing of the cartilage by a fall on the heels, or some such vertical pressure. Nothing serious is thought to have occurred at the time, but subsequently the cartilage becomes swollen and tender, and the patient is unable to stand with a

straight leg. Careful palpation of the joint reveals the swollen structure, which is also tender.

Treatment consists in keeping the limb at rest for a time, and especially from weight carrying. Blisters are useful, and at a later date massage, pressure and exercises against gradually increasing resistance.

The repetition of injuries to the cartilages, either from crushes or displacement and nipping, may be to produce chronic inflammatory changes in the cartilage of a peculiar type, and a chronic arthritis, to which allusion has already been made. Quite recently I operated on a man who came under observation for a cystic swelling on the outer side of the knee, situated exactly on the inter-articular line, and projecting from under cover of the insertion of the ilio-tibial band. It was looked on probably as a cyst or bursa, of which so many are to be found in connection with the knee-joint, and even in unlikely places. There did not seem to be any direct connection with the joint, as alterations in position of the limb did not result in alterations in the tension of the swelling. It was painful, and a cause of weakness and discomfort, and therefore operation for its removal was proposed and accepted. On incision, it was found that fluid of a glairy type, similar to what is seen in bursæ, was present, but that it was contained in a mass of tissue which was continuous with, and, indeed, derived from the external meniscus. To remove the cystic swelling involved also total removal of the thickened cartilage. The result was quite satisfactory. Curiously my colleague, Sir Watson Cheyne, had a similar case to this within a few weeks at hospital, but the condition is obviously rare, as he has only seen one other case, and no other has come under my own observation. The histology of the swollen mass was curious and interesting; but at present we cannot be quite sure as to the exact nature of the process which resulted in the cystic change.

The articular changes which result from the chronic displacement of semilunar cartilages are similar to those known as chronic traumatic arthritis, and are characterised by overgrowth of the margins of the articular cartilages with thickening of the synovial membrane, and perhaps hypertrophy of the villous fringes. A little care needs to be exercised in some of these cases in order to ascertain whether or not a slipped cartilage is present, or whether symptoms of "locking" are due to the nipping of a villous overgrowth. In one of my patients recently there was very marked lipping of the lower end of the femur on the inner side, and a sensation as of synovial fringes rolling under the finger, so much so that I looked on the case for some time as one of osteo-arthritis, and treated it by blistering and rest. When this had failed, and the man came back for further help, one realised that the history of something catching in the joint and of painful locking possibly meant more than this, and although one could feel nothing in the shape of a slipping cartilage, the joint was opened, and I found behind the thickened margins of the bones a loosened cartilage, which was removed with satisfactory results.

3. The articular cartilages are not very frequently the source of internal derangements of the knee. My own experience is limited to two cases, but in each of these there could be no question as to the origin of the trouble.

In one case a portion of articular cartilage, together with the underlying bone, was detached by a process of what the late Sir James Paget described as "Quiet Necrosis," from the substance of the internal condyle of the femur. The patient was a young man, the brother of a house-surgeon, who many years previously had sustained a blow on the knee, when it was acutely bent. In this position the articular surface of the inner condyle becomes much exposed, and a direct blow on the front of the knee will reach it without difficulty. It is quite comprehensible that an injury of this nature could lead to death of the involved portion of cartilage and bone, and that the fragment should be detached quietly into the joint without supuration. In this instance such had obviously occurred, and the fragment had become fixed by a hinge-like adhesion to the lower end of the bone close to its original position. The outcome of this was that sometimes the fragment lay quietly in its old position, or



slipped away happily into the intercondyloid notch; at other times it was caught and nipped between the femur and tibia. The joint was opened and the fragment found and removed by dividing the adhesion. The hole in the lower end of the femur from which it had originally been derived was clearly seen. Such a case might be recognised by the history of a direct blow to the knee, and not a twist or strain applied to the foot; whilst possibly radiography would help in making a diagnosis. Moreover, there would be no spot of localised tenderness, and no looseness of attachment of the cartilages.

In a second case the articular cartilage had become detached in flakelike masses of considerable dimensions in a case of osteo-arthritis. This disease is always associated with cartilaginous changes, but in this instance these had become very exaggerated, and the cartilaginous flakes were abundant and hypertrophic, and were constantly getting between the articular ends of the bones, and giving rise to pain of a more or less characteristic type, suggesting a loose cartilage. There was, however, no history of a strain or of an accident, and the condition of the joint margins might have suggested the existence of the disease. The case was operated on, but naturally although one removed a good deal of the loosened cartilage no good resulted.

Finally, a word of warning must be given as to the possible existence and development of other lesions as a coincident outcome of an injury to the knee which might be expected to lead to some internal derangement. A short time back I was consulted by a young man, aged 27 years, who, eighteen months previously, had sustained a fall from his bicycle, severely injuring the right knee. He seems to have struck the front of the joint, and there was a resultant deep graze. He hobbled home, and was suitably treated, the graze healing quickly, and he was soon able to get about again, though with some discomfort. Four months later he was pushing through a hedge, with the weight of his body resting on the right leg, when something gave way in the right knee, and he fell to the ground owing to the severity of the pain. After lying there for two hours he managed to get home, and was laid up for two or three days. Subsequently he was well enough to cycle and play tennis, though always with some discomfort. After an interval of three months he had a similar experience again, his knee giving out during some effort, and last August he was operated on for a loose internal semilunar, which was removed together with some synovial fringes. He was allowed up at the end of twelve days, and encouraged to move the limb, the result being an attack of synovitis, for which he required the application of icebags in bed for some ten days or more.

When he returned home last September, he was walking much as before, with a good deal of discomfort, and this gradually increased until his limb called for further examination as to the cause of the pain and trouble. When he came under observation in January, 1909, there was a considerable swelling obviously of the lower end of the femur, hard and immobile, and involving the inner rather than the outer side of the bone. This swelling, I was informed, was present when the former operation had been undertaken. X-Ray investigation confirmed the opinion that the swelling was a myeloid sarcoma, and for this amputation had finally to be resorted to. There can be but little doubt that the cause of the myeloid growth was the original fall from the bicycle, and that it had developed coincidentally with the troubles associated with the slipped cartilage. Such a case emphasises the importance of making one's examination of any case as thorough as possible, not being satisfied with merely a superficial investigation, and gives point to the old dictum of Sir William Jenner with which I would close—"There are more mistakes made by want of observation than by want of knowledge."

THE cholera epidemic in the Presidency Hospital, Calcutta has apparently ceased. Altogether 13 Europeans contracted the malady, and of these 10 succumbed. The cause of the outbreak is a mystery as the hospital is the finest in India and has adopted the most modern hygienic methods.

## INTESTINAL SURGERY. (a)

By ARTHUR E. J. BARKER, F.R.C.S.ENG.,  
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In looking back over a very stirring era and in a great centre of medical progress like Belfast one is led to consider what advance has been achieved in our own science and art during that time. In doing so one is almost bewildered by the multiplicity and magnitude of the strides which have been made in surgery in the present generation. Under the inspiring leadership of Lister conquest has followed conquest, until it may be said that there is hardly a region or organ of the body which has not been brought under the beneficent rule of recent surgery. To attempt a review of these achievements within the last twenty-five years would be a task too great for the present occasion. But if I venture to ask you to recall what has been harvested in one field of surgery, which to many of us in our earlier professional days appeared particularly unlikely to yield fruit, and if I endeavour to trace in broad outline the evolution of those ideas which underlie some of the progressive work which has been done in the surgery of the intestines, it may be profitable and encouraging to fresh effort. For it must be abundantly clear to any seriously-reflecting mind that what has been so far achieved is almost as nothing to what remains to be done. Within the memory of many present to-day any transperitoneal interference surgically with the intestinal canal was regarded as one of the most dangerous undertakings possible. Nowadays, although we look upon all intestinal work as demanding the greatest pathological knowledge, technical skill, and judgment, we know that it can claim an ever-increasing measure of success, especially since we have gained a clearer conception of the functions of the peritoneum.

It is, of course, necessary to be very cautious in applying theories to our practice in surgery of the intestines, but we have, I believe, already received much valuable help from them in regard to operations in the abdominal cavity. We have learnt to be more rigorous in our precautions for warding off sepsis from without during operation, more careful to guard the serous surfaces from all rough treatment during manipulation, and from chemical or physical irritation while exposed, and, on the other hand, more hopeful and bolder in cases where it is already obviously present within the abdomen. We are here thrown back upon the faith of our fathers in the vis medicatrix Naturæ—a power intangible, beneficent, all-pervading, claiming our faith, arousing our hope, but baffling our analysis hitherto beyond a certain point. Yes, we have changed our conceptions of the protective and reparative functions of the serous membranes very much indeed within the past few years, and, as a rule, to the advantage of our patients. We recognise and understand their protective purposes more fully, and are careful to foster and not to impede them. Who would have believed a decade or two ago that the brain and cord may be bathed in virulent septic fluid for days, and yet recover all their delicate mechanisms once more, aided by manufactured antitoxins introduced from without. And none have demonstrated this fact more satisfactorily than the physicians of Belfast in your terrible epidemic of cerebro-spinal meningitis.

Again, the fact established by numerous observers now that this same disease in its severe forms may be recovered from under simple repeated tapings of the spinal canal through the lumbar sac without any injection at all suggests strongly that these serous coverings, too, must possess defensive works of the highest order, only requiring slight assistance in the removal of an overplus of poison to effect a complete recovery in many cases. And this does not apply alone to infection with Weichselbaum's bacillus. Those of us who, like myself, have seen our patients in a state of wild delirium, etc., from cerebro-spinal meningitis starting in the ear, relieved almost at once,

(a) Abstract of Address delivered at Belfast before the British Medical Association July 29th, 1909.

and ultimately recovering completely after repeated withdrawal from the lumbar sac of the products of inflammation, are driven to the conclusion that the powers of defence against bacterial invasion possessed by this cerebro-spinal serous membrane must be very great, and analogous to that of the peritoneum. Once the assurance was arrived at that the serous membranes were on the side of the surgeon and not against him, a long step in advance had been made, and we were encouraged to put forth every power to preserve all its protective forces intact. For it became a matter of observation that these could, under certain circumstances, become exhausted. Prolonged exposure and chill, for instance, or injudicious manipulation or sponging quite apart from sepsis, had been found by experiments on animals and in practice on the human patient to lower the reparative forces of the peritoneum. And besides this, though the peritoneum could be shown to tolerate a certain amount of bacterial poison, it became quite clear that, marvellous as were its powers in this direction, they had their limits, and these could ultimately be reached, even in the case of the less virulent organisms. Another observation which has had an enormous influence upon the surgery of the bowel is that healthy intestinal walls will prevent the migration, to any serious extent, of the bacteria of the contents through them, but that if their vitality is lowered (to use an ordinary term) by accident or disease, even without any breach of surface, this migration will take place through mucous, muscular, and serous coats, and the general cavity of the peritoneum will thereby be infected more or less seriously. This most important discovery—first made upon the fluid found in the sacs of herniæ in various degrees of strangulation and then demonstrated experimentally—has had a greater influence on our dealings with the intestines than is commonly supposed.

Other additions to our knowledge, both theoretical and practical, have also combined to remove many of the risks of intestinal operations. Among these our experience had taught us that patients after such procedures need not necessarily be entirely deprived of food by the mouth for long periods. This, of course, is contrary to the teaching of earlier days. And yet it is in accord with sound theory. Then, during the same period, what improvements in the art of administering general anæsthetics has taken place! The drugs are now purer, the dosage better formulated, and the danger signals during administration better understood. We now recognise that the anæsthesia must be pressed while the peculiarly sensitive parietal peritoneum is being manipulated, and may be reduced or actually omitted during the manipulations and stitching of the practically insensitive intestine. The amount of the drug, therefore, given in these mostly protracted operations is now enormously and advantageously reduced in the hands of experienced administrators. This we owe in a large measure to the recent brilliant demonstrations on the innervation of the parietal and visceral peritoneum by our Swedish and Russian *confrères*. Their discoveries supply us besides with many data of the utmost use in the localisation of lesions in the abdomen by painful impressions.

Another point which has had a remarkable influence upon intestinal surgery has been brought out within the last few years, partly by experimental work on animals, and partly by the experience of surgeons who have felt themselves compelled, for one reason or another, to remove considerable tracts of bowel. We have learnt that considerable lengths of the jejunum, ileum, colon, and rectum can be at all ages removed without any very apparent influence for evil upon the processes of digestion and assimilation. I do not for a moment wish to suggest that we have arrived at final conclusions upon this point. I merely desire to draw attention to the fact that for some of the gravest emergencies in human experience large portions of the intestinal tube have been removed without seemingly producing the deleterious effects which might perhaps have been expected. My own experience of such procedure includes the removal in one case of between 6 and 7 feet of small intestine, in several of between 5 and 6 feet, and several more of lesser amounts of both small and large intestine. In none of these was

there any evidence months or years later that the general health had been in any way injuriously affected. And it has been the same in many published cases, though not in all. At all events, I believe it has been shown that the removal of any amount of small intestine up to 6 feet can be well tolerated. And as far as I know from observation and study of the literature of the subject, age or sex does not influence this conclusion. My own eldest case was aged 76, and here at least 5½ feet were excised, the patient being in excellent health two years later, as was also another case over 50, in which I removed 6½ feet. How much of the large intestine can be removed without demonstrable effects on the health is not yet fully known; but for malignant and tuberculous affections nearly the whole has been taken away or excluded from use, and the patients have enjoyed good health afterwards. I have recently seen one of my own cases in which more than five years ago I extirpated a great part of the colon for malignant disease and excluded the rest, and the patient is now in the most robust health, and without any sign of recurrence, with only the rectum representing the large intestine. Having reviewed some of the factors contributing to our present success in intestinal surgery, let us glance at some of the conditions formerly considered desperate which have been actually relieved during the last decade or two. Among the injuries, punctured and bullet wounds and bad contusions of the bowel have been successfully dealt with; gangrenous strangulations, external and internal, with or without the removal of long pieces of bowel, have been saved; large sarcomata involving intestine have been extirpated, tuberculous tracts of intestine in a hopeless condition of ulceration have been taken away with transient or permanent relief; typhoid ulcers and perforations have been excised, and though only a small percentage of the patients afflicted with them have been saved, owing to the general condition, we must remember that the best authorities tell us that the mortality of typhoid perforation treated without operation is 98 per cent. Intussusceptions operated on at a reasonably early stage are now almost invariably successful. But perhaps the greatest achievements of intestinal surgery have been those gained over the terrible cancers of the bowel, so hopeless and so distressing until quite recently. This evolution of intestinal surgery has not been the result alone of the better conception of sepsis, much as we owe to it. Nor has it been due altogether to improved manipulative skill.

It has resulted from clearer views on the vital processes concerned in all lesions within the abdomen. These we have gained partly from closer clinical observation, aided by what we have learnt from the anatomist, the pathologist, bacteriologist, biologist, and physicist, and from careful sifting of our experiences, whether of failure or success. Looking back, as I have tried to do here, and looking forward, as every hopeful man must and ought to do, we see encouragement in both directions. What has been done within the last few years in this important field of surgery, in spite of the enormous difficulties which surround it, assure us of a far greater yield in years to come, working, as we shall do, under more favourable conditions and with ever-increasing knowledge. Is anyone inclined to despond, thinking, mayhap, of the magnitude of the problems still unsolved and the smallness of his own individual powers in grappling with them, let him listen to the clarion note which rang out just one hundred years ago from one ranking among the greatest philosophic thinkers of his day, and certainly its greatest poet—

Wish upon wish to nobly gain,

Wake up; behold the rising sun.

Those lowering clouds will break in rain;

Rend sleep's brief thrall and gird thee on.

Rouse thee; be bold; and greatly strive.

Heed not the falt'ring, loitering throng.

The lofty soul can all achieve,

Whose thought is swift, whose grasp is strong.

This appeal has since then been finely responded to by his own countrymen, though at the time almost crushed materially and inclined to be despondent. Let us see to it that we, too, undeterred by the languid interest in science of a commercial and materialistic

age, press ever onward, thankful for past achievements in the interests of suffering humanity as we look backward, hopeful and courageous as we look forward to the years to come.

### THE USE OF "ESCALIN" (ALUMINIUM GLYCERINE PASTE) IN GASTRO-INTESTINAL DISORDER (REPORT OF SIX CASES.)

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IN the "Medical Annual" for the current year there appears a brief notice of the therapeutic uses of powdered aluminium. The account is culled from German literature, and, so far as I know, the subject has not been given any prominence in English medical periodicals. I therefore venture to publish the following notes, for, though my experience is admittedly meagre, the results obtained by the exhibition of this drug seem to me sufficiently noteworthy to warrant its being accorded a more extended trial.

The preparation, known by the trade name of "escalin," is obtained from Charlottenburg. It consists of a paste made up of two parts finely-powdered aluminium to one of glycerine. The product arrives packed in glass tubes, each containing five small cylinders of the paste wrapped in silver paper. The weight of an individual cylinder is about 4 grammes (dr. i.).

To dispense, I have found the following method to answer well:—Take the contents of one tube, strip off the silver paper, and crush the paste into small lumps. These are then placed in an 8-ounce bottle by means of a scoop, and about an ounce of glycerine and 4 ounces of water are added; the whole is vigorously shaken till all lumps disappear. The bottle is now completely filled, and the "escalin" mixture is ready for dispensing.

Of this mixture, the dose varies according to the severity of the case, from a tablespoonful three times a day between meals to double this amount taken every two hours, with complete abstinence from solid food. The bottle should be well shaken until an appearance like silver paint is produced; the medicine is then poured into a spoon and immediately swallowed. Patients are sometimes rather inclined to look askance at such a peculiar-looking mixture, but a little reassurance is generally all that is necessary to overcome their doubts. The stuff has a sweetish, slightly metallic taste, but cannot be called really unpleasant. The doses above mentioned are considerably smaller than those officially recommended, but I have found them sufficient in my own practice.

**Case 1. Morphia Gastritis.**—E. P., an old lady, æt. 73, suffers from chronic sciatica of a very painful type. A prolonged course of drug treatment, combined with electricity and vibro-massage, having failed to give much relief, malignant disease was suspected. The patient, however, refused rectal examination, and the exhibition of morphia in increasing doses became necessary. After some months of this treatment a severe gastritis developed, presumably due to the morphia. Digestive ferments, preparations of bismuth, and various diets were tried unavailingly; any attempt to reduce the narcotic resulted in a great access of pain. At length, as a *dernier ressort*, I determined to use "escalin." The effect was very marked. In two days the patient was relieved, and in a week's time resumed a solid diet. Similar attacks of gas-

tritis, of which there have been several, have up to the present always proved amenable to the same remedy.

**Case 2. Hæmatemesis.**—F. L., female, æt. 43, is afflicted with exophthalmic goitre. During a course of electrical treatment to the neck the patient suddenly developed a severe attack of hæmorrhagic vomiting. Treatment by morphia hypodermically, bismuth mixtures and liquid diet, gave relief, but a return to solid food caused relapse. Aluminium was now substituted for bismuth, and continued for the same length of time—a fortnight—when solids were again administered. Whether *post* or *propter hoc*, no return of the symptoms occurred, and the patient has not since had an attack (three months).

**Case 3. Gastric Irritability and Entero-Spasm.**—Mary H., æt. 10, was under treatment for chronic infantile paralysis affecting right lower limb. In addition to the local lesion, her general health left much to be desired. Amongst other troubles, solid food nearly always produced violent gastric pain, and not infrequently diarrhoea, within a few minutes of its ingestion. I found that this vicious tendency could be controlled by the administration of tinct. opii, min. iii., half an hour before food; on stopping the drug, however, the spasm returned. Regarding the opium as a somewhat dangerous remedy, I substituted bismuth, without much success. Finally, "escalin" mixture was tried—a tablespoonful t.d.s. between meals. This acted as well as the opium. The aluminium was continued in the same amount for a fortnight, then gradually reduced, and stopped at the end of three weeks. The condition of the stomach and bowels has not since given any cause for anxiety.

**Case 4. Chronic Dysentery.**—M. W., a man, æt. 30, who had been for some time resident in Spain and North Africa, developed a bowel complaint having the clinical features of dysentery. He was advised to return to England, and told that the change of climate would probably effect a natural cure. This prognosis was not verified, and he was compelled again to seek advice. He came to me complaining of chronic looseness of the bowels, tenesmus, and some loss of blood at stool. He was pale and emaciated, and stated that he was rapidly losing weight. Physical examinations failed to reveal anything more than slight thickening of the left colon, together with some tenderness in this region. The stools were fluid, streaked with blood, and contained a few small scybala. A course of grey powder, grs. v., t.d.s., brought away a considerable quantity of hard faecal pellets. By the end of a week the motions were clear of these masses and the offensive smell had disappeared; they continued fluid, however, and occasionally blood-stained. The patient was now placed on "escalin" mixture—an ounce every two hours. On the third day of this treatment blood ceased to appear in the fæces, on the fifth the stools were formed, and by the end of another week the patient was able to begin a cautious return to ordinary diet. The exhibition of aluminium was continued in diminishing quantities for a month, at the end of which time the man appeared to be cured. A slight relapse occurred three weeks later; this was similarly treated, and the patient has since (two months) been perfectly well.

**Case 5. Ulcerative Colitis.**—This occurred in a young woman, æt. 26. Though there was no history of residence abroad, the clinical features were very similar to those in Case 4; they need not therefore be detailed. It must suffice to say that in this instance the diseased area seemed to extend over the whole of the colon, and

the blood was more intimately mixed with the fæcal matter. Six weeks' rest in bed, with careful dieting and the administration of aluminium effected a complete cure.

*Case 6. Mucous Colitis.*—This last I quote as an example of a disease having diarrhoea for its most prominent symptom, in which aluminium was *not* successful; and also, incidentally, as tending to support the theory which refers this complaint to a "neurotic" rather than an "organic" (inflammatory) origin. The patient, a youth, æt. 20, engaged in the study of engineering, began to suffer some two or three years ago from a "nervous" diarrhoea. At first this manifested itself only at periods of special stress—*e.g.*, before and during his professional examinations. Insidiously, however, the trouble developed; it began half-way through the term, then left him free only during vacation, and finally was with him always. When I first saw him he was thin and nervous-looking, afraid to eat, and passing three to four loose mucoid stools daily. There was no blood, and physical signs were absent. Encouraged by previous successes with "escalin," I hoped to find a short cut to a cure. Not the slightest benefit resulted. The disease resisted aluminium as it had defied all previous drug medication. After a month's continuous treatment with full doses, I gave up the attempt, and began a course of abdominal gymnastics, electricity and massage. The patient is now slowly improving.

*Conclusions.*—The use of "escalin" seems to be indicated in all cases where bismuth fails. It should not be prescribed without previously giving older remedies a trial, as it is expensive, even when used sparingly. The action of the drug appears to be purely mechanical, a protective covering being formed over the diseased gastric or intestinal surfaces. The aluminium appears unchanged in the fæces in from six to twenty-four hours after its ingestion. So far as my observation goes, there are no side effects. I have myself taken large quantities as a test, and have never experienced any inconvenience. The harassed general practitioner, struggling vainly with chronic and intractable lesions of the alimentary tract, might do worse than experiment with aluminium glycerine-paste before turning over his cases in despair to the abdominal surgeon.

## THE LEGAL PROTECTION OF THE CHILD IN THE STRUGGLE AGAINST ALCOHOLISM. (a)

By DR. HERCOD,

Lausanne.

OUR century, which has frequently been called "the Century of the Child," and sometimes deserves to be so called, has done very little to protect the child against the ill-treatment to which it is exposed by alcoholic parents. It needed in England the articles of Mr. Sims, "The Cry of the Children" and "The Black Stain," to awaken public attention and provoke legislative intervention which has produced the Children's Act of 1908, that "Grand Charter" of the English child.

The principle of legislative intervention to protect the child is no longer contested, and many States, besides England, have already interesting enactments on this subject.

The research made by the author of this paper relates to legislation in England, Germany, Switzerland, America and Finland.

(a) Abstract of Paper read before the International Temperance Congress, London, 1909.

It includes the following points:—

1. Measures taken to protect the child against alcoholic parents.
2. Prohibiting the giving of alcoholic drinks to children.
3. Children and legislation in regard to public-houses.

### I.

Legislation which allows the drunkard to be put under tutelage or into a special asylum (England, Germany, Switzerland, etc.), provides against the ill-treatment inflicted on a child by an alcoholic parent as a motive for interference. The text indicates less, except in English and American legislation, what is to become of the child whose father has been placed under control or in an asylum. Note the legislative measures taken in Rhode Island, where it is provided that the children of drunkards shall be confided to a special society *at the cost of their parents*. This provision hinders unworthy parents from making use of the State in order to rid themselves of their own responsibility in regard to their offspring.

Unless they are backed by a strong public opinion, the laws in regard to paternal neglect will remain a dead letter. They must, therefore, be enforced with persistence. Temperance societies, in every locality, ought to act as a Vigilance Committee, and make known to the authorities and the press the ill-treatment inflicted on children by drunken parents. They will also point out to the societies for the protection of children the great part that alcohol plays in regard to the ill-treatment of children. The institution of a central committee of the juvenile temperance societies, such as the Swiss "Jugendwerkzentrale" (Central Juvenile Work), might be very useful in this direction.

### II.

In proportion as the special dangers of alcoholic drinks for children are known, the question will be raised as to how far the law can forbid everybody, even parents, to give such to children under a certain age. If, theoretically, such a law is made, it is very difficult to carry it out, because many people regard it as interfering with the family rights, or, at least, as a sort of hateful inquisition, and it is difficult to prove the infraction of the law. It is doubtless for this reason that most of the American laws prohibit any one, *except parents or guardians*, to give alcoholic drinks to children. But such an exception appears to deprive the law of its usefulness. The English law in "The Children's Act" has gone to the root of the problem, and even forbidden parents to give alcoholic drink to their children under five years of age, except in extreme cases. Only to five years, is very little, but the habits of the people must be borne in mind, especially in such conditions as would make it quite impossible to apply the law. The age limit should, therefore, gradually be raised, and in the meantime the parents must be taught the reason why the law has been made. This can be done by the officers of the law, or by doctors distributing cards of instructions at the time when the child is vaccinated, etc.

### III.

All modern legislation seeks to keep children out of the public-house. Sometimes the publican is forbidden to serve drink to children who are not accompanied by a responsible adult (as in most of the Swiss cantons, Hamburg, Wurtemberg, Mecklenburg-Schwerin, etc.). In other places it is generally forbidden to children unaccompanied to enter a public-house (as in Bern, Glaris, Argovie, Oldenburg, Baden, Waldeck, and the greater number of the American States). Unfortunately this prohibition is a dead letter in many countries. The fault is due to public opinion which remains

indifferent, and to the law which provides ridiculous penalties (in Baden 1 to 3 shillings, Appenzell 5 to 10 francs). A heavy fine for the first offence, and taking away the license for a second, would very soon bring the offenders to reason.

The law might go further, considering that the public-house is not a place for children, and it could forbid them to enter, even if accompanied by their parents or a responsible person. Here also the English Parliament has made an innovation, and forbidden children to enter a public-house even when accompanied (Children's Act, par. 120). A similar rule is found in the legislation of Arizona. However legitimate this prohibition may be, it encounters great difficulties. The parents think they are the best judges as to where they shall take their children. Perhaps it would be possible, in order not to offend public opinion too much, which at present is not sufficiently enlightened, to limit the prohibition to the evening hours, but in any case to forbid any drink being served to children, even when with their parents.

In many countries the laws also deal with the employment of children in the public-house, either on account of morality or of health. In Switzerland the age limit is usually fixed at eighteen for girls (in Zurich it is twenty), and at sixteen for boys; but an exception is always made in favour of the publican's family. The German law fixes twelve as the age limit for boys, and thirteen for girls, as far as regards waiting; the children of the publican make no exception except in towns of less than 20,000 inhabitants. The United States have been very energetic in this matter. The State of Wyoming forbids the employment of women and young girls under twenty-one. Connecticut, Idaho, Maryland, etc., the same. Other States allow a lower age.

It seems to us that if women are allowed to serve in a public-house the age of twenty should be the minimum, at least in regard to waiting. For youths eighteen at least. Exceptions in favour of children of publicans are not justifiable, at least in regard to serving.

#### CONCLUSIONS.

1. The children of alcoholic parents, being minors, should be taken from them and confided to the care either of charitable institutions or placed in private families (abstainers if possible). Unworthy parents should be made to contribute to their support if possible.
2. The law should forbid even parents to give their children alcoholic drinks. In fixing the age the state of public opinion must be taken into account. Measures should be taken to make parents understand the reasons for such prohibition.
3. Minors up to the age of eighteen should be forbidden to enter a public-house in order to drink unless accompanied by their parents. An exception may be possible in case of boarders, at meal times.
4. Children under fourteen years of age should not be allowed to enter a public-house after seven in the evening, even if accompanied by their parents.
5. It should be prohibited to employ young women or girls under twenty, and youths under eighteen as waiters, whether they belong to the publican's family or not.

(The figures indicated are approximate.)

## OPERATING THEATRES.

### GREAT NORTHERN HOSPITAL.

APPENDICITIS WITH FOREIGN BODY IN APPENDIX.—MR. ARTHUR EDMUNDS operated on a girl, æt. 22, who was suffering from symptoms of acute appendicitis.

The patient, who was a domestic servant, went to bed perfectly well, but shortly after waking next morning was seized with violent pain in the abdomen and vomiting. She was brought into the hospital, where she presented all the typical signs of an acute appendicitis. The abdomen was rigid, especially over the right iliac fossa; there was marked tenderness, but no definite tumour; the temperature was about 103, the pulse was rapid, and the girl's general facies was quite in accordance with the physical signs.

The abdomen was opened by the usual incision, and a few drops of turbid yellowish fluid came out on opening the peritoneum. The appendix could be felt lying downwards towards the brim of the pelvis. There were no adhesions, and after the rest of the peritoneal cavity had been packed off, the appendix, which was surrounded by a small collection of pus, was hooked up into the wound without difficulty and amputated in the usual manner. The pus was carefully wiped up, and three drainage tubes put in: one into the pouch of Douglas, one into the lumbar pouch, and a third down to the root of the appendix.



The interest of the case, however, Mr. Edmunds said, lay entirely in the nature of the appendix; on examining this after removal, the distal inch-and-a-half was found to be intensely inflamed and covered with lymph. There was a perforation about an eighth of an inch in diameter about the middle of the inflamed portion. The rest of the appendix was normal, and as can be seen by the figure the junction between the normal and inflamed portions of the appendix was quite sharply marked. On slitting open the appendix, the distinction between the two portions was, if anything, more pronounced, and in the lumen of the inflamed part there was an ordinary black steel pin, not particularly corroded, with its head lying at the very end of the appendix, and its point reaching exactly to the junction of the inflamed and normal portions. Several points naturally, Mr. Edmunds remarked, presented themselves for consideration; in the first place, the exact limitation of the inflamed area to that portion of the appendix containing the pin was very striking, but against this it must be remembered that it is quite common to find the terminal portion of the appendix acutely inflamed, while the proximal three-quarters of an inch remain absolutely normal. The relationship between appendicitis and the presence of foreign bodies in the appendix was difficult, he thought, to determine, for, although it has taken a great hold on the popular imagination, it must be confessed that cases like the present were extremely rare; also that appendicitis is very common without a foreign body, and that a large number of cases have been collected where foreign bodies have been found post-mortem without any signs of appendicitis. It was possible, therefore, that the presence of the pin in this case was simply a coincidence. From the look of the pin, its presence in the appendix was of comparatively recent date, and the absence of all history of any previous intestinal disturbance suggested that this was the first attack, and that the onset of the symptoms coincided with the perforation of the appendix. This perforation was not near the point of the pin, which, from its position, must have slipped in from the large intestine head first, so that there was no reason for associating the perforation with any gross lesion produced by the pin itself. It was possible, however, that the presence of the foreign body started an inflammation which was kept up by infection from the bowel, the site of the perforation being determined by the vascular distribution in the organ. The patient is now progressing favourably.



## SPECIAL REPORTS.

### THE SEVENTY-SEVENTH ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION AT BELFAST.

[FROM OUR SPECIAL CORRESPONDENT.]

THE SECTIONS (*Continued from our last*).

#### Ophthalmology.

Two interesting discussions were held in this section, and both were well attended. The first was on the WORKMEN'S COMPENSATION ACT AND EYE INJURIES. It was opened by Dr. Freeland Fergus, of Glasgow, who discussed the usefulness of mathematical formulæ in expressing the value of varying degrees of vision. He came to the conclusion that such formulæ were not of much use, as the kind of sight required in different classes of work varied so much. In some trades visual acuity is of the first importance, while in others it is only of secondary importance, the capacity for work depending on a good light sense and good alignment.

Dr. Cecil Shaw (Belfast) said I desire specially to deal with the unsatisfactory working of the Workmen's Compensation Act with regard to compensation for the loss of an eye. According to the Act, no compensation is given for such loss, but only for partial or total incapacity for work. Where one eye is lost and the other is healthy, a man soon learns to work with one eye, and in the great majority of cases work can be done quite as well as before. I know of four men in this district who are daily driving motor cars, in spite of having lost an eye, and one of them, a professional chauffeur, told me that six months after the accident by which his eye was lost, he had forgotten all about it. According to strict interpretation of the Act, such cases should only obtain compensation for the few months that elapse before they are fit for work again. But the true injury in loss of an eye is not generally any loss of capacity for work, but lies in the greatly increased risk of total blindness owing to disease or accident in the other eye. Every one is liable to such disease and accident, but to the one-eyed man it is a much more serious event than to the man who has another eye to depend upon. Owing to this many employers avoid one-eyed men, since a slight accident to one eye may totally incapacitate them. Even though perfectly fit for work they may fail to obtain it on this account. An interesting case occurred in my experience a short time ago, of which the facts were briefly as follows, I believe.—A working girl lost an eye by accident, and after some months' incapacity, for which she received compensation, she returned to her work, which she was able to do efficiently. But when slackness of work arose, and she had to seek work elsewhere, she could not get a job, on account, as she believed, of her being one-eyed. She then brought an action for compensation, but it was pointed out that there was no ground to go upon, since there was no incapacity, as proved by her having worked at full wages for some months after the loss of the eye. I believe that a better form of compensation for the loss of an eye would be a sum fixed according to the average wages, to be paid irrespective of all theories or statements about a workman's capacity for work. The endless litigation involved in such cases benefits the great learned professions, no doubt, but it involves serious loss to the workmen, for whose benefit the Act was passed, and out of whose pockets eventually the cost of the litigation comes.

The discussion was continued by Dr. Brailey (Hove), Mr. Bishop Harman (London) and others. Professor Fuchs discussed the Continental methods of dealing with compensation claims. Sir Victor Horsley and Mr. Berry (Edinburgh) both agreed with Dr. Cecil Shaw that persons who lost an eye quickly learned to work well with monocular vision.

The second discussion was opened by Mr. Treacher Collins, and was on

#### DISEASES OF THE LYMPHOID TISSUE OF THE CONJUNCTIVA,

and resolved itself into a discussion upon trachoma, in which Professor Greef (Berlin), Professor Fuchs

(Vienna), Dr. Nelson (Belfast), and many others took part. Professor Fuchs seemed to have little doubt that the true trachoma germ had at last been found. It appears first in the mucous membrane of the upper retrolarsal fold, and lingers there longest.

Sir Victor Horsley read a highly technical paper on "Optic Neuritis," which provoked a lively discussion. Dr. W. M. Killen (Belfast) read a paper on the association which he believes to exist between asthenopia and adenoids.

#### Naval and Military Section.

In this section a paper by Colonel James, R.A.M.C., was read by Captain Cunningham, on the "Officers' Training Corps," with special reference to its medical branch. He said that in case of war the Army Medical Department would have to be increased to about double its permanent size, and a large call would be made on the civil medical profession. He proposed to make use of the Officers' Training Corps as a means of forming a medical reserve to call upon in case of need.

Lieutenant-Colonel Potter, R.A.M.C., read a paper on the "Physical Training of Recruits." He described the present methods of physical training, which, he said, were based upon the Swedish system, and differed entirely from those in use a few years ago. The great aim used to be the production of enormous masses of muscle, while now it is the harmonious development of the whole organism, and the promotion of the utmost efficiency in its working as a whole. At the conclusion of the paper a practical demonstration of the methods was given on a party of recruits sent up from the Victoria Barracks for the purpose, and Colonel Porter answered a number of questions as to details.

#### THE MEDICAL LIBRARIES ASSOCIATION.

The annual meeting of the Medical Libraries Association was held on July 28th, in Queen's University, Belfast. After the transaction of some purely formal business, the President, Prof. W. Osler, F.R.S., delivered an address on the "Medical Library as a Factor in Post-Graduate Work." A large and representative gathering was present, which in a most enthusiastic manner showed its appreciation of the eloquent address. In conjunction with the meeting an exhibition of over two hundred valuable and interesting medical MSS. books, photographs of libraries, etc., was held in the Engineering Drawing Room from July 27th to 30th. The exhibition was divided into seven sections. Two MSS. in Section 1 called for special attention, an English one of the 14th century, on urine (Manchester Medical Society), and another on the same subject, about the same date, in Latin and Irish (Trinity College, Dublin). Section 2 contained fifteen volumes printed before 1500, amongst them the first edition of "Celsi de medicina liber," 1478 (Dr. Lloyd Roberts), the works of Mesue, 1478 (Bristol Corporation), the surgery of Guy de Chauliac, 1480 (Manchester Medical Society), and the "Anatomia of Mundinus," 1493 (Dr. Lloyd Roberts). Amongst the books printed since 1500, Section 3, were two copies of Raynalde's "Birth of Mankind," 1528 and 1613 (Dr. Lloyd Roberts and the Bristol Medical Library), Faier's "Regiment of Lyfe," 1567, Paynel's "Regimen Sanitatis Salerni," 1541 (both by Dr. Lloyd Roberts), and a pamphlet on "Variolous Contagion," 1808, by Jenner (Prof. Lindsay). An exceptionally fine collection of books by Irish authors, or printed in Ireland, formed Section 4, lent principally by Dr. Kirkpatrick, of Dublin, and the R.C.P.I. Prof. Osler had lent two interesting collections of books relating to Michael Servetus—whose quartercentenary occurs this year—and Ulrich von Hutten, the scholar-knight, who described the treatment of syphilis in his own person. The final section contained a series of books on consumption, commencing with Celsus, who recommended an open-air treatment and milk diet, and ending with the Countess of Aberdeen's "Ireland's Crusade against Tuberculosis."

The following were also among the contributors:—Royal College of Surgeons of England, Steeven's Hospital, Dublin, Sir W. Whitla, Dr. W. L. Storey, Mr. R. M. Young, Ulster Medical Society, Dr. Marion Andrews, Mr. E. G. Clayton, Queen's University,



Belfast, Linen Hall Library, Belfast Corporation, Dr. Parker, Bristol, Bristol Medical Library, Mr. Swanston, Belfast, and Mr. Somerville, Sheffield. Messrs. Bell and Mayes had also most generously loaned a number of cases.

#### ANNUAL TEMPERANCE BREAKFAST.

The annual temperance breakfast in connection with the meeting of the Association was held in the Central Hall of the Municipal Technical Institute on Thursday morning, July 29th, and was attended by between 300 and 400 guests. The Lord Mayor (Sir Robert Anderson, J.P.) presided, and welcomed the members present to Belfast. He expressed his warm interest in the temperance question, of which he is an ardent supporter. (Probably a good many visitors were surprised to find in Ireland a Lord Mayor who had the courage of his convictions in this matter, and gave no alcohol in any form at his entertainments, either public or private.) Dr. Kelynack, Hon. Sec. for the Society for the Study of Inebriety, gave an interesting address, in which he summed up the proceedings of the International Conference on Alcoholism which had met in London the previous week. Dr. Crothers (an American visitor), Dr. Norman Barnett (Belfast), Mr. McAdam Eccles, F.R.C.S. (London), and others also spoke.

#### THE GOLF MATCH.

One of the most interesting events of the Belfast meeting was the presentation of the Belfast Golf Cup, which took place at the Annual Dinner, and the first match for the cup, which was held at the Royal County Down Golf Club's links at Newcastle on Friday, July 30th. The cup was presented to the President of the Association by Mr. Kirk, the President of the Ulster Medical Society, on behalf of the golfing members of that Society, who had subscribed for it. At the match on Friday the members competing, who numbered over one hundred, were entertained to luncheon by Mr. and Mrs. Kirk, and afterwards to tea by Dr. R. L. Bell, of Newcastle, in the Club House. The match resulted in a win for Dr. Shekleton, of Holywood, who was 2 up on bogey. The play over the Newcastle course, which is probably the most difficult first-class course in the United Kingdom, was a trying ordeal for many of the visitors who had never seen the links till that day.

#### THE EXCURSIONS.

In accordance with the usual custom, Saturday following the meeting was devoted to excursions, of one or other of which a great number of the members availed themselves. They were three in number. Portrush and the Giant's Causeway was naturally the most popular and largely attended. Portrush was reached about 11 o'clock, and after light refreshment the electric tram was taken to the Causeway, where about three hours were spent. Happily, the day was fine and calm, so that many members were able to go out in the boats and see the Causeway and surroundings in the best possible way. In the afternoon the tram was taken back to Portrush, where a late luncheon was provided. The second tour was to Parkmore and round the Antrim coast to Larne, by the famous Coast Road, stopping for lunch at Garron Tower Hotel. The third excursion was to Warrenpoint, where the party was entertained by the Warrenpoint Urban Council, who took them a trip on the beautiful waters of Carlingford Lough. The whole arrangements for the excursions were carried out without a hitch by Messrs. Thos. Cook and Sons, under the superintendence of Dr. R. J. Johnstone, Hon. Sec. of the Excursion Committee.

#### THE EXHIBITION OF FOODS, DRUGS, INSTRUMENTS, ETC.

The annual exhibition of instruments, drugs, etc., was held in the Exhibition Hall of the Botanic Gardens, most conveniently situated at the back gate of the College grounds, so that members could drop into the exhibition at odd times for a few minutes. The hall is large and airy, and both exhibitors and visitors greatly appreciated the comfort of it. Taken as a whole, the show was excellent, and well repaid careful study. It is only possible here to notice a few of the more striking exhibits, and many of interest must be omitted for want of space.

Just inside the main entrance was one of the largest

exhibits, and one which many members were glad to see again, after several years' absence from the annual exhibition—that of Messrs. Burroughs Wellcome and Co. In addition to the well-known products with which all medical men are familiar, the firm showed a number of recent introductions and improvements. The advantages of Ernutin, the active principle of ergot, are widely recognised, but a new preparation of ergot has lately been introduced, and was shown under the trade name of Tyramine. This presents the chief active constituent of aqueous extract of ergot, the organic base, which is produced by bacterial or other ferments from the amino-acid tyrosine. Tyramine may be used for raising the blood pressure in shock or collapse, and for producing contraction of the uterus post-partum.

The arylarsonates are also important additions to the products of the firm, made as a direct result of recent researches. These organic preparations of arsenic have been used with benefit in trypanosomiasis, syphilis, and malaria. "Soamin" contains 22.8 per cent. of arsenium, and is soluble in five parts of water at 60 deg. F., giving a neutral solution which can be sterilised. "Orsudan," another preparation, is even more remarkable for its low toxicity relative to its percentage of arsenium. Recent experiments indicate its usefulness in malaria.

The various serums and vaccines produced by the firm are well known, and fresh additions are constantly being made. Needless to say, hypodermic medication and toilet specialities made a good show.

Messrs. Savory and Moore had a fine exhibition of infants' and invalids' foods, including their well-known peptonised preparations, of which several new forms have lately been introduced. Their excellent "Valveless" feeder was also shown.

Messrs. Hoefftke, Ltd., showed various appliances for joint diseases, extension of the spine, etc., and also their highly ingenious "auto-gloving machine," by which a rubber glove can be put on without being touched on the outside at all.

The Maltine Manufacturing Co. showed the many varieties of malt preparations for which they are so widely known, as well as Carnrick's "Beef Peptonoids."

Plasmon, Ltd., showed that useful proteid in apparently unlimited and protean forms, including Plasmon tea, cocoa, oats, arrowroot, custard, biscuits, chocolate, and beef-tea.

Messrs. Parke, Davis and Co. had a fine exhibit rightly classed as "modern therapy," as it included the most recent improvements in their various productions such as chloretone, eudrenine, sprays and inhalants, hypodermic syringes and drugs, and serums of all sorts. The preparation of the different things shown was described in short lantern demonstrations which were given at intervals all day.

The Chas. H. Phillips' Chemical Company exhibited their now well-known and admirable milk of magnesia as well as their excellent tonic and anti-periodic "phospho-muriate of quinine compound."

The Bayer Company showed many of their well-known products, such as aristol, aspirin, brotargol, etc., and several new preparations. Among the latter was Guaiacose, a tasteless, odourless, and non-toxic compound of guaiacol for use in the respiratory tract. Thyresol, a methyl-ester of santalol, used in gonorrhoea, was also shown. It is said to be less toxic than sandalwood oil, and less irritating to the stomach.

Chas. Hearson and Co. showed several of their biological incubators with patent temperature regulation, including new forms for Opsonic work, and some heated by electricity. Centrifuges were also shown, among them the "Copenhagen Model," giving 9,000 revolutions a minute.

Siemens Bros. and Co. showed a great variety of electrical apparatus, comprising complete X-ray outfits for private and hospital use. Their Universal and Safety Protective Tube Stand seemed to be a most convenient and complete piece of apparatus. They also showed a clinical temperature recorder by which the temperature of patients can be continuously recorded at stated intervals, as, for instance, every 12 minutes for many days, or even, for special investigations, every quarter of a minute.

The Apollinaris Co. showed Apollinaris, Apenta, and

Johannis waters. One wonders if there are any medical men in the country who are not already familiar with at least the two former, but presumably among the host of new waters the old favourites are liable to be forgotten if they do not show themselves.

Messrs. Armour and Co., who describe themselves as specialists in high-testing digestive ferments, showed an absolutely bewildering array of pepsins, pancreatins, enzymes, peptones, bone marrow, suprarenalin, trypsin, lecithin, and the glandular extract of each and every organ in the body. After these, the plain extract of beef by the same manufacturer seemed flat, though some old-fashioned visitors might be inclined to say it was worth the lot!

Fairchild Bros. and Foster showed a very similar range of products, beginning with acid extract of duodenum, and ending with zymine.

The Sanitas Co. showed Sanitas Fluid and its many derivatives for household and hospital disinfection "of all co-efficiencies of all kinds and for all purposes." Their latest introduction is Sanitas floor and furniture polish, which sterilises all wood upon which it is smeared.

Mellin's stand was, as always, particularly attractive to lady visitors, for not only are the biscuits, chocolate, etc., most tempting to the modern Eve, but the photographs of Mellin babies are an endless source of interest.

The Cellular Clothing Co. had an excellent exhibit of their underwear, including their new red garments for use in the Tropics, where they are believed to stop the penetration of the blue actinic rays of the sun, now credited with the production of sun-stroke.

Jeyes' Sanitary Compounds Co. showed their non-toxic bactericide Cyllin, and its many derivatives, such as cyllin gauze, wool, powder, ointment, etc. The basis, cyllin, is guaranteed to be at least ten times less toxic than carbolic acid, and to have a very high efficiency as tested with various harmful micro-organisms.

Bovril and Virol do not depend upon the attractions of novelty, but upon the well-trying friendship of years, so that there is nothing much to be said of their exhibits, except that they are as neat and attractive as ever.

Messrs. Grattan and Co., of Belfast, had a good show of their various aerated waters, which, though not pushed or advertised as widely as many others, are generally considered in Belfast as hard to equal and impossible to surpass.

The hot springs of Bath are not leaving everything to the foreigner, and are now showing an enterprise which, if it had stirred a few centuries earlier, might have resulted in a most useful testimonial from Julius Cæsar or King Alfred. But better late than never, and every patriotic Briton must be glad to see the excellent exhibit made now, which ought certainly to result in a wider use of these fine baths.

Brand and Co. and Cadbury and Co. are among our old friends, whose useful preparations we welcome each year.

Messrs. Down Bros. had a very large exhibit of surgical instruments and apparatus, chiefly new and original designs carried out by them at the request of various surgeons. The number of items in their list is far too large for them to be recounted. One cannot help wondering how many of them will be in use five years hence! The survival of the fittest is never better illustrated than in these instruments, many of them mere modifications of old patterns, and some simply old patterns revived without any modification whatever. But old or new, the same care and skill are expended on their manufacture, and the exhibit was a credit to British workmanship. The hospital furniture shown by this firm was of great interest, specially various forms of operation table.

Messrs. John Weiss and Son showed a large collection of surgical instruments of all the latest patterns, such as Brunig's and Killian's for Bronchoscopy, etc., also Barker's, Moynihan's, Landolt's, and other recent introductions.

Messrs. Mayer and Meltzer showed all their latest introductions, including improved patterns of their well-known University electric examination lamp, and

a very complete collection of instruments for throat, nose, and ear work, both hand and electro-motor.

The Holborn Surgical Instrument Co. had a large exhibit of surgical instruments of every description. A number of sets of instruments for special work of various descriptions were shown, and at prices more common in Germany than in London. The glass-ware and sundry small fittings for consulting-room or hospital extern were very attractive.

Frank Rogers showed a very interesting assortment of sprays and atomisers of every description. The sets of sprays for aqueous and oily solutions on stands for consulting-room use were specially neat and ingenious. A new and apparently very efficient chloride of ammonium inhaler was also shown.

Messrs. Jas. Woolley and Sons, of Manchester, showed a great variety of modern pharmaceutical preparations, appealing specially to those who dispense their own drugs, etc.—work which is simplified and facilitated by their concentrated mixtures. They also showed various instruments and pieces of apparatus, such as their ingenious "Fotoret" electric lamp, and their "Victoria" sterilising outfit.

Messrs. Oppenheimer and Co. made, as usual, a special feature of their Aeriser in its various forms. The new foods and drugs shown included Roboleine, said to be "a really complete scientific food," and Mergal, an organic salt of mercury for use in syphilis.

Messrs. Bailliere, Tindall and Cox, Appleton, Frowde, Lewis, Lippincott, Rebman, Saunders, Wright, and others showed all the latest medical publications, a great boon to country practitioners who cannot often visit a good book-shop.

It only remains to be said that from all accounts a large amount of business was transacted, and that both exhibitors and visitors seemed satisfied with the general arrangements.

*(To be concluded in our next.)*

## CORRESPONDENCE.

### FROM OUR SPECIAL CORRESPONDENTS ABROAD.

#### FRANCE.

Paris, August 8th, 1909.

#### ULCER OF THE CORNEA.

THE treatment of ulcer of the cornea is in general very tedious; Roure recommends the application of a one per cent. solution of formol twice a day on a piece of absorbent cotton after introducing a few drops of a solution of cocaine. In the interval of dressing the eye should be kept covered. The progress of the cure can be verified in touching the lesion every three or four days with a solution of methylene blue, which only stains the parts deprived of epithelium. Where no stain is observed, the ulcer is cicatrised and the application of formol may be suppressed.

Cacodylate of soda has also been used with benefit: an ointment of two or three per cent. is applied to the lids every night for a week, and afterwards every second night.

Besides the ointment, five drops of a three per cent. solution are instilled every morning for a fortnight.

Under the influence of this treatment, the ulcerations heal rapidly.

#### PULMONARY TUBERCULOSIS.

While the world is anxiously waiting for some specific treatment for the plague of humanity called consumption, efforts are constantly being made to arrest as much as possible the inevitable disintegration of the organism affected with that dread disease.

Among the multitudinous remedies recommended of recent date may be mentioned injections of camphorated oil (1-10) into the middle of the back, repeated twice in four days, with an interval of ten days between every new series of injections.

According to Prof. Koch, the night sweats disappear and the weight of the patient increases under the influence of the treatment. At the same time he recommends rubbing the skin with a drachm of an ointment composed of camphor, Peru balsam, and oil of eucalyptus.

M. Renon said injections of an ounce of marine serum once or twice a week increase the weight and appetite and improve the general condition. Fever is a counter indication to this treatment.

#### HÆMOPHILIA.

Where injections of gelatin, adrenalin or ergotin remain without effect on the hæmorrhage, excellent results can be obtained from injections of anti-diphtheritic serum.

#### EXOPHTHALMIC GOITRE.

Perhaps the best treatment of this curious affection would be at each meal a teaspoonful of hæmato-ethyroidine during 15 days, and recommenced after a few days' suspension. At the same time, the patient should be advised to himself apply an electric treatment with a simple faradic battery, one electrode at the back of the neck, the other moved over the thyroid tumour. This treatment should be followed for months.

Powder of hypophyse or the pituitary gland in three grain doses before each meal might also be utilised.

Weber recommends pills (three daily) of arsenious acid and corrosive sublimate, one milligramme each (1-64 gr.), for several weeks.

#### TINCTURE OF IODINE.

Cases of poisoning by tincture of iodine swallowed accidentally, or with suicidal intent, are not rare.

Once in a while every practitioner has had to treat such accidents, and different antidotes have been tried after a preliminary evacuation of the stomach by a simple vomitive or the stomach pump. It is thus that a mixture of starch has been given with a view of converting the iodine into iodine of starch, mucilaginous drinks and injections of morphia to ease the pain.

The best antidote is, however, hyposulphite of soda by which the iodine is transformed into tetrathionate, a non-toxic product and well-known to chemists. A solution of 10 per cent. of hyposulphite is sufficient, according to Dr. Lemaire, to discolour half of its weight of tincture of iodine. Its employment is easy: in case of local accidents, compresses of the solution will remove the excess of iodine without irritating the teguments.

For poisoning by the mouth, the patient is ordered to swallow by sips the solution between the seizures of vomiting provoked by the poison; in passing down the throat and the œsophagus, the counter poison neutralises the action of the iodine on the mucous membrane, and is afterwards rejected in the vomiting, which is first of a yellow or bluish colour, and finally becomes colourless.

The efficacy of hyposulphite of soda as a counter poison resides not only in the rapidity of the neutralising action, but also in its innocuity. It has also the advantage of being easily obtained. It is found in every drug store and with those, and they are legion, who practice the art of photography.

Hyposulphite of soda is also useful for removing the stains of tincture of iodine from the hands, linen, etc.

#### CATAMENIAL PAIN.

Acetate of ammonia	...	1 oz.
Tr. of piscidia erythrina	...	5 dr.
Tr. of viburnum prunifolium	...	5 dr.
Tr. of valerian	...	5 dr.
Tr. of anemone pulsatilla	...	2 dr.

From 2 to 5 teaspoonsful a day in a little water.

### GERMANY.

Berlin, August 8th, 1909.

At the Medical Society, Hr. Hamburger spoke on COLOURING THE LIVING HUMAN EYE FOR DIAGNOSTIC PURPOSES.

He mentioned fluoresceine, introduced by Ehrlich into physiology, a material which, injected into animals subcutaneously, had the property of imparting a green colour to fluid of the anterior chamber of the eye. Ehrlich himself, as well as Leber, later coupled this with observations on intra-ocular tissue change and renewal, and applied the conclusions drawn to man, but, as the speaker thought, incorrectly. The attempt to inject fluoresceine into the human subject was only made once, and showed that it was dangerous. On the

other hand, however, he had given fluoresceine-sodium (uranine) to many patients by the mouth in increasing doses—6 to 8 gm. for adults—without the least harm. After giving it, intense jaundice set in; the saliva became green, and the urine red. These symptoms disappeared in at most 12 to 24 hours. The colouring matter never passed into the healthy eye, but it did into one that was inflamed in its interior, and the more the eye was inflamed the more intense was the colouration; on subsidence of the inflammation the colourability also subsided. Inflammations of the conjunctiva, however severe, did not lead to colouring. The disease must be intra-ocular. The observation showed that tissue change within the eye progressed very slowly, that in the inflamed eye it was accelerated, and, further, that experiments made on animals were not necessarily applicable to the human subject. In practice the fluoresceine experiment was not without value when in doubtful cases it was difficult to determine whether the interior of the eye was inflamed or not.

Hr. Paderstein showed a man who had a splinter of iron in the lens. It was quite easily recognisable, as the other parts of the lens were perfectly transparent. Extraction with the magnet presented no difficulty, but removal would leave a traumatic cataract behind. As the patient had lost one eye through a similar accident some years before, the speaker had come to the conclusion of leaving the foreign body where it was until it set up some kind of disturbance.

At the German Society for School Hygiene (tenth annual meeting), Prof. Best, Dresden, spoke on PROTECTION OF THE EYE IN SCHOOL AND HOME.

He was of opinion that the reaction of the youthful eye to eye-strain was the development of short-sightedness, the only morbid change that was to be feared during growth of the eye, as the result of intense eye work. The protection of the growing eye against overwork was therefore identical with combating short sight. In this warfare near eye work under unfavourable and unsuitable conditions must be avoided; further, the length of time of the near work must be limited, by lessening the tasks, by a changed method of learning, and by reduction of home tasks. A certain diminution might be made in the amount of matter to be learned. For instance, there was no need to learn four alphabets. Italian letters, printed and written, were all that were necessary.

Hr. Lehrer Graupner, Dresden, desired that for proper lighting of desks the sky should be visible from each one through the upper panes of the window at a distance of at least 40 cm. As writing at first required some fixity in the work, it should be more and more relegated from the elementary classes; furthermore, everything that made eye work difficult should be done away with—too sloping desks, double lines, network lines, etc. The Italian and German alphabets were to be built up on the most simple foundations, and in writing they should be made to assimilate to each other more and more. Elementary reading could be founded on a preliminary course, by which the analysis of sound and the synthesis of consciousness of sound might be awakened in the child. If a commencement were made with the Italian alphabet, instead of 78 signs there would only be 37 to start with. Manual training also required careful supervision.

Hr. Hauptmann v. Ziegler observed that every year Germany lost the services of 9,000 defenders through visual defects. Short-sightedness brought on by long-continued near work might be avoided by practising distant vision; eye gymnastics should therefore be practised in school, and in the school playground by looking at distant objects, in association with games and walks.

### AUSTRIA.

Vienna, August 8th, 1909.

#### THE BOWEL AS AN OSMOTIC MEMBRANE.

At the Gesellschaft der Aerzte, Pribram gave a long explanation of his experiments in the laboratory on absorption in the bowel under different pathological conditions. He first demonstrated the bowel to be a colloidal membrane whose permeability in the case of crystalloids is rapid in health, but in chronic

enteritis this function is greatly reduced, but in acute enteritis the opposite is the case. This is an important maxim to be borne in mind by the clinician, particularly in cases of children where the osmotic function is of such consequence. It is well illustrated in the latter where galactosuria accompanies a sharp attack of enteritis in the febrile stage with a profuse elimination of salines and sugar, but as soon as the storm is over a generous diet will rapidly restore the child to its former condition.

Pribram, although confirming the fact that crystalloids are rapidly absorbed in acute forms of bowel complaint, affirms also that colloids are no exception to this speedy osmotic absorption. He finds albumen, ferments, and toxins more rapidly absorbed and diffused by the acute inflamed bowel than when in the healthy condition.

Clinically, he thinks this teaches us to abstain from salines and saccharine fluids in acute enteritis, but administer them freely in chronic cases of enteritis in order to restore the bowel to a healthy osmotic state.

#### PRESERVING HUMAN MILK.

Mayerhofer next raised the question of preserving human milk for feeble babies where a wet nurse could not be obtained. He proposed a modified form of Budd's method, by putting 0.1 of a centimetre of peroxide of hydrogen in 400 cubic centimetres of mother's milk. If the milk were acid a little superoxide of magnesia would relieve this. This method has been adopted in Kaiser Joseph's Hospital with perfect success. It is quite possible in this way to preserve the complete nutritious quality of the milk as well as its sterilisation for months at a time, thus emancipating the nurse who has hitherto been the infant's slave while the child is receiving its natural food.

Escherich said he would criticise Pribram first. His experiments opened up a new field of investigation as he has conclusively proved a difference in the power of absorption in chronic, natural, and acute conditions of the bowel, which is a confirmation of Meyer's results; but we must not err in our haste to immediately act on these results till we have eliminated all possible errors. What is the difference in the epithelial cell of the bowel before and after the bowel has been disturbed for the experiment? This might make a difference in the osmotic function of the bowel of the child after death as well as that of the guinea pig, *i.e.*, the living organism *in situ* may be functionally different than in these laboratory experiments.

As for Mayerhofer's budderised human milk it will be of little practical value. No doubt in weakly children with neither mother nor nurse, coming to hospital, this conservation may be of some value, but for the practitioner it is a hopeless innovation.

Hochsinger thought the idea of budderising human milk was a good one, as the mother's milk was often quite unfit, from its acidity, for the alimentary canal of the infant when drawn from the mother with the exhaustor and disinfected, the danger to the child is less. It is found in practice, however, that when a milk exhaustor is used the secretion subsides, not having the stimulus of the child. To counteract this defect Jashchke has devised a milk pump to effect this stimulus.

Teleky could not see much benefit to be derived from Mayerhofer's budderising as many mothers could not complete the feeding of baby, while other healthy mothers may be quite able to give a large quantity beside nourishing their own children and without damaging health, but the question arises: Is it wise?

Pribram, in his reply, said the operations carried out in the guinea pigs were as nearly natural as could be, as very little of the bowel was disturbed from its attachment. In the bowels of the children he admitted they were post-mortem, but they agreed in every detail with the bowel of the live animal in the same experiments.

In answer to the criticism on the milk conservation he never found the milk supply from the female diminish prematurely by using the breast exhaustor, on the contrary it was increased.

As to the exhaustion of the female it was the duty

of the collector to select strong, healthy mothers, and see them kept in that healthy condition. Extraction from feeble mothers was not to the benefit of either mother or child. The experiment is only in its initial stage, and cannot be accepted as a palladium until further experience proves all that is claimed for it.

## FROM OUR SPECIAL CORRESPONDENTS AT HOME.

### SCOTLAND.

EDINBURGH UNIVERSITY, NEW PROFESSOR OF ANATOMY.—The curators have unanimously elected Professor Arthur Robinson, of the University of Birmingham, to succeed the late Professor D. J. Cunningham. Professor Robinson graduated at Edinburgh with honours in 1883, and in 1890 was awarded a gold medal for his M.D. Thesis on "The Development of Rodents." After graduating he demonstrated anatomy at Surgeons' Hall, Edinburgh, and thereafter assisted Professor Turner in the University. In 1884-5, owing to the illness of the late Professor Morison Watson, he undertook the practical teaching of anatomy at Owens College, and he remained in Manchester until 1896 in the capacity of demonstrator at Owens College, and subsequently lecturer in the Victoria University. He left Manchester for the Middlesex Hospital Medical School, where he entirely reorganised the anatomical department, and left it second to none in the Metropolis. In December, 1900, he was appointed Professor of Anatomy at King's College, and served on a number of boards and committees connected with medical educational work. In 1904 he was elected Professor of Anatomy in Birmingham, and since 1905 has acted as sub-Dean of the Medical Faculty. He delivered the Hunterian Lectures to the Royal College of Surgeons in 1903, on the comparative anatomy of the placenta. Professor Robinson has thus had an unusually large share of experience in organising, teaching, and administration, and his teaching has been attended with uniform success, both as regards increase in the number of students in his various schools, and as regards the raising of the level of anatomical study to a higher standard.

## LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

### THE NEWSPAPERS AND ADVERTISEMENTS.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—The following paragraph appears in *Punch* of to-day, August 4th:

"In an action brought by the *Times* to recover the price of an advertisement article, the defendant alleged that the contract was for an advertisement in the form of a leading article. 'That, of course, was out of the question,' stated plaintiff's counsel, 'as no paper would enter into such an agreement.' This clearly proves that legal innocence is not confined to the Bench." Mr. Punch is evidently very well aware that, with the exception of the *Times* and a small percentage of papers that place honour before pelf, every newspaper has its price, and in the majority of cases the price is a low one. The majority of newspapers now accept advertisements well knowing them to be false and fraudulent, and a great number insert them in editorial form. Some time ago the proprietors of a gross fraud in form of a mechanical contrivance for the cure of an incurable surgical disease made an offer by circular letter to all the medical papers for insertion of advertisements in form of editorial articles; and all these papers published and commented upon this impudent procedure. The offer was doubtless made widely among lay papers, many of which printed the puffs in question. The offer to the medical papers was probably made by mistake. The incident was, however, sufficiently significant. It seems a pity that Mr. Punch whose function it is to expose humbug, and shoot folly as it flies, does not get

expert advice as to the quality of some of the advertisements which appear in his own pages, or inquire into the question for himself. The occasional appearance of announcements in the least degree questionable in *Punch*, forms a justification for his less scrupulous contemporaries in "going one very much worse." If Mr. *Punch* wishes for enlightenment on this subject he can find it in the pages of recent volumes of the MEDICAL PRESS, or in the Report of the Australian Royal Commission on Quackery; and as this Report is not easily to be obtained in this country, I shall be glad to lend him mine to study at his convenience.

I am, Sir, yours truly,

HENRY SEWILL.

The Old Rosery, Redhill,  
August 4th.

#### THE NORMYL TREATMENT OF ALCOHOLISM. *To the Editor of THE MEDICAL PRESS AND CIRCULAR.*

SIR,—By the courtesy of some anonymous friend, I yesterday received a copy of "Medical Temperance Reformer's" letter which appeared in your issue of July 28th. It proves that your correspondent is a man of leisure and fond of writing superfluous letters, which is certainly not the case with my 150 medical customers nor myself. Why should he not undertake the scientific inquiry which he advocates? There is nothing to hinder him, and he will find at the office of the Normyl Association plenty of material to work upon. There is nothing so cocksure and nobody so deluded as a scientist without experience, and no one more humble than a truly scientific person who has learnt and is ever learning in the school of actual fact. It is a matter of no importance whatever that your correspondent is uncomplimentary, or that, in parrot-like fashion, he says, "The whole thing is a delusion." Your readers who care about the truth and the actual saving of alcoholic victims can judge for themselves by inquiry and examination. The Normyl treatment is by no means ignored, but is constantly and increasingly used by truly scientific persons, and the annual rescue of something like a thousand persons from misery affords plenty of consolation to me for the occasional jeers of a merely nominal reformer.

I am, Sir, yours truly,

CECIL CHAPMAN.

#### THE QUACK MEDICINE TRADE.

*To the Editor of THE MEDICAL PRESS AND CIRCULAR.*

SIR,—Every practitioner of much experience can testify from personal knowledge to the truth of the indictment of the traffic in quack medicines formulated in the course of the admirable paper on Medical Journalism by Dr. David Walsh in your current issue. The description fraudulent, cruel, and murderous applied to the trade repeatedly by Mr. Henry Sewill is entirely accurate; and I agree with him that on humanitarian grounds alone it is the duty of our profession to force the facts upon the attention of statesmen, and put upon them the responsibility for the continuance of a system which is inflicting such injury upon the poor and ignorant classes. I am making note of cases in the courts in which the worst evils of quackery are exposed, and if others will do the same throughout the country the evidence available for a Royal Commission, or for embodiment in a demand for a Commission, can easily be made irresistible. Here are three recent cases. A child died without medical attendance. The medical evidence at the inquest proved the death due to double pneumonia. The parents, questioned by the Coroner, stated that they had relied throughout upon a "lung healing" medicine advertised in the local papers. A man died without medical attendance. At the inquest it was proved that, disregarding the advice of his doctor, he had relied upon a cure for diabetes warranted successful "without other medicine or change of diet." A man died from dropsy due to kidney disease. He had not been medically attended, but had pinned his faith on a much advertised kidney cure. It is significant that although in each of these three cases the names of the quack medicines were repeatedly mentioned in court, they were not given in the newspaper reports; and the local papers continue to publish puffs of these frauds in the

form of editorial paragraphs. The case before Mr. Justice Lawrence at the Sussex Assizes, two years ago, shows that the law is now sufficient to reach a great section of quack medicine vendors, but there exists no authority with powers and obligation to put it in force. Heavy penalties can be inflicted upon food adulterators, or upon violators of the Merchandise Marks Acts, fine or imprisonment for falsely labelling cigars or brandy; but it is at present impossible to punish the criminals who, by means of persistent lying advertisements, induce wretched sufferers from organic and malignant disease amenable to scientific treatment, to rely upon nostrums the complete worthlessness of which can be demonstrated even to those who have no scientific knowledge whatever.

I am, Sir, yours truly,

August 2nd. AN OBSCURE PRACTITIONER.

#### CONJUNCTIVITIS NEONATORUM.

*To the Editor of THE MEDICAL PRESS AND CIRCULAR.*

SIR,—You published in your journal for April 1st, 1908, an editorial under the above heading, in which you condemned the use of the term "ophthalmia" as applied to the conjunctival inflammation of infants, pointing out that the term was obsolete, inaccurate, and unscientific. Despite, however, this expression of opinion, I notice in your issue for this week a leading article, entitled "Ophthalmia Neonatorum." It would be interesting, no doubt, to your readers to learn from you the method by which the inconsistency of this policy could be justified.

I am, Sir, yours truly,

July 30th, 1909. ANOTHER OBSCURE PRACTITIONER.

#### THE DECLINING BIRTH-RATE.

*To the Editor of THE MEDICAL PRESS AND CIRCULAR.*

SIR,—I am glad to see your able article on the above subject. It is of tremendous importance to the State, and of extreme interest to the physician and to the sociologist. On several occasions you have allowed me to enter into the discussions that have taken place in your columns. I have always held that a declining birth-rate due to the causes which have brought it about in France is a sign of national decay. It will lead to the conquest or subjection of the decaying races by more virile stocks; and if the decay is to affect fully all the western nations it will probably terminate in realisation of the "yellow peril"—the dominion of the world by the Japanese and Chinese. The declining rate is not due to loss of fertility; it is brought about solely by the deliberate action of married people. Their motive is a narrow form of anti-social and anti-patriotic egoism. The parents look upon toil and self-sacrifice as evils to be shunned; their ideal is idleness and luxury; and they want to avoid for themselves and their few children the necessity of entering into a vigorous battle of life. The population of France is far below her home requirements; she has no prospect of being able to people the vast overseas territories—the highlands of Madagascar, for instance—where there is room in suitable climates for many millions of inhabitants of European blood. Every Frenchman has been for many years fully aware that the increase in the German population would in a short time place their country at the mercy of their mighty neighbour, and, whilst constantly proclaiming their lofty patriotism, the French have universally refused to do the only thing possible to put their nation in a position of honourable security. Instead of this, they subsidised at a stupendous cost the Russian Government to act as their ally—a government which personified every one of the evils against which Frenchmen are never tired of declaiming. The humiliating position in which France has deliberately placed herself is only one of the many big symptoms of her moral decay. In spite of the fact that she has produced a Pasteur and other commanding intellects during the past century, it would be easy to describe a great number of other symptoms pointing to decline in all the powers that go to sustain the greatness of a people. French wealth has rapidly accumulated, whilst Frenchmen have, with equal swiftness, decayed.

I am, Sir, yours truly,

August 4th. A STUDENT OF SOCIOLOGY.

## OBITUARY.

**WILLIAM ARTHUR FOXWELL, M.A.,  
M.D.Cantab., B.A.Lond., M.Sc.Birm., F.R.C.P.**

WE regret to record the death of Dr. William Arthur Foxwell, who recently met with an accident whilst cycling. He was riding along the outskirts of Warwick, when he was upset by a dog which ran out of a side street and dashed into the machine. Dr. Foxwell fell on his head and sustained injuries to the base of the skull and spine. He was picked up unconscious, and was removed to the Warneford Hospital, Leamington, where he lay until his death.

Dr. Foxwell was born at Shepton Mallet in 1853, and had therefore but recently completed his 56th year. His early education was obtained at Queen's College, Taunton, whence he passed to St. John's College, Cambridge, where he graduated as M.A. and M.D., taking a distinguished place in the Natural Sciences Tripos and in the medical examinations. He followed up his medical studies at St. Thomas's Hospital, London, and the General Hospital, Vienna. In 1873 he added to his other distinctions that of B.A. (London University), with honours in English and Moral Science. He became a Fellow of the Royal College of Physicians in 1892, and was also an M.Sc. (Birmingham University). His work in Birmingham commenced as pathologist at the General Hospital in 1884, and he was also assistant physician from 1885 to 1889. On the transference of Queen's College to the Birmingham University he became one of the Professors, and presided over the studies of the students in therapeutics. He received from the University its degree of M.Sc. In 1896-98 he was examiner in medicine to Cambridge University.

Dr. Foxwell was the President of the Birmingham Medical Institute, an institution which he also served as honorary librarian from 1887 to 1901, and for two years he was the Editor of the *Birmingham Medical Review*. Amongst other professional honorary posts which he had filled was that of President of the Midland Medical Society. He was recognised as one of the best authorities in the country on the subject of heart disease. He contributed many papers to the medical journals, and also published separately essays on heart and lung diseases, the enlarged cirrhotic liver, the spas of Mid-Wales, and the causation of functional heart murmurs. He joined the staff of the Queen's Hospital in 1889, and last year he was chairman of the medical committees of the institution.

His chief memorial in connection with the hospital, which he served with the utmost devotion, will be his initiation of the roof ward system, now successfully established at the Queen's for the treatment of serious diseases other than those of tuberculous origin.

Outside the institutions and societies connected with his profession, Dr. Foxwell took little part in public life. He was not a man of strong physique, and was obliged to husband his strength as much as possible apart from his work as a physician, in which he never spared himself. His chief recreation was gardening, and his general pursuits in private life were scholarly.

**EDWARD BENJAMIN STEELE-PERKINS, L.S.A.**

WE regret to record the death at Exeter, at the age of 67, of Mr. Edward B. Steele-Perkins, a well-known surgeon of the city, and a member of an old Exeter family. For nearly forty years he was a familiar figure in Exeter, and his geniality won him very many friends. Entering into partnership with his father in 1879, he commenced his career in the city as a medical practitioner, and continued until laid aside by illness three years ago. He was at various times medical officer to the Exeter Oddfellows, to the Conservative Equitable Benefit Society, and was honorary surgeon to the Devon and Exeter Home of Refuge. He was keenly interested in the volunteer force, and for many years held a captaincy in the 1st Devon Artillery Volunteers, retiring about ten years ago with the honorary rank of major. He succeeded to the freemanship of the city by inheritance on the death of his father. For several years he rendered useful service on the Exeter City Council, as a representative in the

Conservative interest of St. Sidwell's Ward, for which he was first elected a member after a keen party contest.

**EDWARD HEPBURN SECCOMBE.**

WE regret to announce the death of Dr. Edward Hepburn Seccombe, who for upwards of 30 years was a well-known medical practitioner in the district of Belgravia. Dr. Seccombe, who was the youngest son of the late Sir Thomas Lawrence Seccombe, G.C.I.E., entered King's College Hospital as a student, and became qualified as a member of the Royal College of Surgeons in 1867, and as a licentiate of the Society of Apothecaries in 1868. In the following year he obtained the M.B. degree of the University of London, and subsequently became an associate of King's College. Dr. Seccombe had been medically connected with the Metropolitan Convalescent Institution, the Royal Pimlico Dispensary, and the Royal India Lunatic Asylum, Ealing.

## MILITARY & NAVAL MEDICAL NOTES.

**INVESTIGATIONS ON TYPHOID CARRIERS.**—It is a pity that Members of Parliament are trying (by asking the Secretary of State for War unnecessary questions in the House about germ carriers) to thwart the Military Medical Authorities in their efforts to do good work. It is in the interests of the soldier, his comrades, and the civil community indirectly that the treatment is being carried out of possible carriers of typhoid infection, and Mr. Haldane is to be congratulated on assuming a firm attitude.

**THE NEW DIRECTOR-GENERAL, ARMY MEDICAL SERVICE.**—Now that Surgeon-General Gubbins, Deputy Director-General, has been appointed the coming Director-General of the Army Medical Service, speculation is rife who is to be the next Deputy Director-General, for that will mean succession in course to the Director-General's chair, as it has been settled that every Deputy Director-General shall succeed to the Director-General's chair. The decision to appoint Dr. Gubbins to the chief post has been received with much satisfaction by the Army Medical Service.

**THE NEW PROFESSOR OF TROPICAL MEDICINE.**—Major W. S. Harrison, R.A.M.C., who has been for many years assistant to Lieut.-Colonel Temple at the Pasteur Institute at Kasanti, has been selected to succeed Lieut.-Colonel R. J. S. Simpson as Professor of Tropical Medicine at the Royal Army Medical College, London. Captain J. C. Kennedy, who did excellent work with the Malta Fever Commission, succeeds Major Harrison as Assistant Professor of Pathology at the College.

**HOSPITAL STOPPAGES FROM NAVY PAY.**—Some time ago we noted the dissatisfaction which existed among the sailors of our Navy in respect of hospital stoppages. A deputation waited on the First Lord of the Admiralty, and pointed out this among other grievances in the naval ranks. Thanks were given to their Lordships for the recent concession of 30 days in respect of hospital stoppages; but hope exists that the full requirements of the men of deducting no stoppages at all will be entertained by the Admiralty.

**THE GERMAN NAVY HEALTH REPORTS** for last year show that the sick rate has increased, being 500 per 1,000, the highest being in East Africa, *i.e.*, 992.8 per 1,000. The average duration of treatments was 18.3 days—on board ship 8.5 days and on shore 9.8 days, but in China at Kiau Chin 15.3. Of recruits 23 per 1,000 of the naval force were discharged chiefly for cardiac diseases. Diseases of the heart and lungs are the most frequent causes of invaliding. The mortality is low, 1.5 per 1,000. Among the causes of deaths, 14 suicides (3 officers) are shown.

**ROYAL ARMY MEDICAL CORPS.**—Colonel A. Peterkin



vacates the post of Administrative Medical Officer at Cape Town, he having been selected for the appointment of P.M.O., London District.—Lieut.-Colonel Sir J. Fayrer, Medical Officer of the Duke of York's School, is to be appointed for duty at Hong Kong.—Lieut.-Colonel M. W. Russell, Medical Inspector of Recruits, Eastern Command, will succeed Lieut.-Colonel C. R. Tyrrell on August 22nd as staff officer to Surgeon-General J. C. Gorman, C.M.G., P.M.O. Eastern Command.

## LABORATORY NOTES.

### MESSRS. BURROUGHS WELLCOME AND CO.

We have been favoured with several samples of Messrs. Burroughs Wellcome and Co.'s new products. A soloid of zinc sulphate should prove extremely useful to all who may be in want of solutions of that drug. Each soloid is made up of such a strength as to furnish, when dissolved in 1 oz. of water, a 1 per cent. solution available for ionic medication. Another useful tabloid has 4.37 grammes of potassium iodide. Another contains a similar quantity of sodium chloride, and is handy for making normal saline solutions.

### IMPORTANT ARYLARSONATES.

STRIKING clinical results have been reported from the use of the arylarsonates introduced by Burroughs Wellcome and Co., under the trade-mark names of "Soamin," "Kharsin," and "Orsudan." In the treatment of syphilis, sleeping sickness, malaria, and other protozoal diseases, the low toxicity of these salts enables physicians to administer comparatively large quantities of arsenic without toxic effects.

"Soamin" (sodium para-aminophenylarsonate) is stable, uniform in action, is soluble in about five parts of water, and gives a neutral solution which can be sterilised. It contains 22.8 per cent. of arsenium in organic combination, and has less than 1.40 the toxicity of arsenious acid. Results of the administration of "Soamin" in cases of syphilis demonstrate the great therapeutic value of this agent. It can be obtained in the form of powder or of tabloid.

"Kharsin" (sodium 3-methyl-4-aminophenylarsonate) is soluble in two-and-a-half times its weight of water, and gives a neutral solution. It contains 23.7 per cent. of arsenium, and is about equal in toxicity to "Soamin."

"Orsudan" (sodium 3-methyl-4-acetylaminophenylarsonate) is anhydrous. It is soluble in three times its weight of water, and gives a neutral solution. It contains 25.4 per cent. of arsenium, and is the least toxic of the three salts, being 1.5 or 1.6 less toxic than "Soamin," and has been found of marked value in malaria. It is sold as powder or tabloid.

It need hardly be added that the arylarsonate salts should not be given by the mouth, as they are broken up by the acid contents of the stomach, and the effects of over-treatment by arsenic are thus more easily produced. Freshly prepared solutions should be administered by subcutaneous or intra-muscular injection, preferably the latter. "Soamin," again, should not be used simultaneously with mercury, nor administered until fifteen days after mercurial treatment has ceased.

### PARKE, DAVIS AND CO.

We have been favoured by Messrs. Parke, Davis and Co. with samples of the following novelties:—

#### ADRENALIN TABLETS No. 2.

Each of these tablets contains 1/200 grain of adrenalin, and is therefore of the same therapeutic value as 5 minims of the 1/1,000 solution. They are put up in tubes of 25 tablets, a form which is not only convenient for carrying, but also preserves the properties of the drug. For obtaining a prompt physiological effect, one or more of the tablets, as may be required, may be placed under the patient's tongue, whence the drug is rapidly absorbed, or may be dissolved in sterile water and administered hypodermically or intravenously. The tablets are also useful for adding to solutions of cocaine or other analgesic for topical or subcutaneous administration to avoid pain and bleeding in minor surgical operations.

### ADRENALIN AND NOVOCAINE TABLETS.

These tablets are supplied in two strengths. No. 187, dissolved in 15 minims of water, forms a 2 per cent. solution of novocaine with 1 of adrenalin in 3,000; No. 188, in the same quantity of water, forms a 1 per cent. solution of novocaine with 1 of adrenalin in 6,000. Experience proves that stock solutions of adrenalin and novocaine are not so efficient as those made at the moment of use. These tablets, therefore, are not only convenient (they are most readily soluble), but offer the best means of employing novocaine, which is said to be the equal of cocaine in anæsthetic power and less toxic, in association with the ischæmic properties of adrenalin in surgical operations.

### ADRENALIN AND CHLORETONE SUPPOSITORIES.

Each suppository contains 3/200 grain of adrenalin (equivalent to 1 in 1,000), and 3 grains of chloretone in a cacao-butter base, and affords a reliable means of obtaining constringent, analgesic, and antiseptic effects in rectal disorders, such as hæmorrhoids, pruritus, ulceration, etc.

### ADRENALIN COMPOUND SUPPOSITORIES.

Each contains 1/100 grain of adrenalin, 3 grains of formidine, 1/2 grain of cocaine hydrochloride, and 3 grains of extract of hamamelis. Formidine is a condensation product of iodine, formaldehyde, and salicylic acid, and is an effectual germicide, and is said to be superior to iodoform in that it is free from noxious odour. In analgesic power these suppositories are superior to the preceding, and they also include the valuable tonic astringent influence of hamamelis. They are employed in the same class of disorders as specified for the foregoing, and are supplied in boxes of one dozen.

### MERCURETTES.

Mercurettes are oblong blocks (cleanly and convenient), in which metallic mercury is most intimately incorporated with cacao-butter, and agreeably perfumed. Each block contains the amount of mercury present in 1 drachm of the pharmacopœial ointment, though in a somewhat greater dilution, which lessens danger of irritation to the cuticle. Any quantity that it may be required to use can easily be apportioned by cutting the block. They are primarily intended for the inunction treatment of syphilis, for which purpose cacao-butter provides an agreeable vehicle for the mercury, in every way preferable to the lard and suet basis of the B.P. ointment. But they may also be used for any condition in which the external application of mercury is indicated. Though of firm consistency, vigorous friction quickly causes the mercurette to penetrate the skin. Mercurettes are supplied in boxes of six.

### PITUITRIN.

Pituitrin is an extract of the infundibular portion of the pituitary gland. It exerts a vaso-motor constrictor action very similar to that of adrenalin, but somewhat more prolonged, and an influence on the circulatory system similar to that of digitalis and strophanthus. It very considerably increases the urinary flow. Pituitrin may be given either orally or hypodermically in doses of from 10 to 30 minims four times daily. It is supplied in bottles of 1 oz.

### BAYER CO.'S PRODUCTS.

We have received from the Bayer Company various samples, which we have pleasure in introducing to the notice of readers. Thyresol, a methyl ether of santalol, intended for the internal treatment of gonorrhœa. It is chiefly remarkable in that, while it is claimed to have powerful antiseptic properties quite equal to those of santalol, the latter body is not liberated in the system. Thyresol contains no free hydroxyl groups, and is relatively non-toxic. Mainly for these reasons it obviates such unpleasant by-effects so frequently associated with sandalwood oil medication, as excitation, irritation of the stomach, loss of appetite.

The dose of Thyresol is 5-10 grains three or four

times a day, and may be taken in drops, capsules or tablets. A feature of the last-named is the magnesia carbonate forming their base—the combination exerting a distinct laxative effect—an obvious advantage in gonorrhoea.

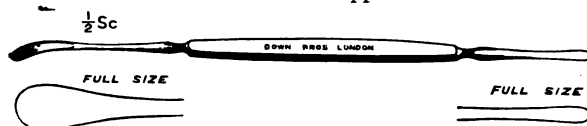
## NEW INSTRUMENTS.

### A COMBINED CATARACT SPOON AND SPATULA.

By H. H. B. CUNNINGHAM, M.D., F.R.C.S.I.,  
M.R.C.S.Eng.,

Assistant Surgeon, Belfast Ophthalmic Hospital; Examiner in  
Ophthalmology, Royal College of Surgeons, Ireland.

IN performing the operation of cataract extraction, and more especially when it takes place in a private house, the surgeon is not always provided with the number of assistants and of appliances that are to be



found in a modern well-equipped hospital, therefore the less the actual number of instruments the better for the operator. With this aim in view, the instrument shown in the accompanying drawing has been designed. It consists simply of an ivory handle, into one end of which is inserted a tortoiseshell spatula and into the other a tortoiseshell spoon. The handle is made of ivory on account of its light weight, and also because with this instrument it is easy to estimate the amount of pressure that is being exerted on the eye when in use. The makers are Messrs. Down Bros., London.

## MEDICAL NEWS IN BRIEF

### Action for Negligence.

DURING the recent Belfast Assizes the Hon. Mr. Justice Dodd heard the action brought by John Beattie, smith's finisher, 33 Lomond Avenue, against Dr. John S. Bryars, 239 Mountpottinger Road, and Dr. Charles A. Mateer, Kimberley Gardens, Bloomfield, to recover £1,000 damages for personal injuries alleged to have been caused by the negligence and want of skill of the defendants. Mary Beattie, wife of the plaintiff, deposed that previous to the accident her husband was a strong, healthy man. When he was brought home after the occurrence he was in great pain, and Dr. Bryars, the society doctor, was sent for. She stated that Dr. Bryars said her husband was struck on the sciatic nerve, and described the treatment given. Dr. Mateer was subsequently called in, and the treatment was continued. Eventually the plaintiff went to the hospital, and had an X-ray photograph taken of the limb by Mr. Rankin, but Dr. Mateer did not tell her what the photo showed. In January her husband was examined at the hospital by Surgeon Campbell, who gave him medicine to strike fluid out of the bone. Surgeon Campbell said he was full of rheumatics. In February plaintiff went to see Dr. Allworthy, who told him that the neck of the thigh bone was broken, and, as a result, he was taken to Surgeon Kirk and operated upon in the Royal Hospital, where he was a patient for nine weeks. At the present time her husband's leg was almost three inches short.

Cross-examined by Mr. Chambers, K.C.—She did not complain of Dr. Bryars being inattentive, but she thought he did not examine her husband sufficiently. Dr. Mateer made a thorough examination of the limb. Dr. Wadsworth, who had examined her husband, said he had got a very bad knock on the thigh bone.

By Mr. Macaffree.—Dr. Mateer did not advise that another doctor should be called in, and that an X-ray photograph of the limb should be taken. Dr. Mateer had attended witness and her children for years, and always gave satisfaction.

Dr. Samuel W. Allworthy, Antrim Road, deposed that Beattie came to him to be treated for sciatica, and after examination witness came to the conclusion that he was suffering from a fracture of the thigh bone.

Dr. John S. Bryars was then called, and, examined by Mr. Hanna, described his diagnosis of the case, from which he came to the conclusion that the plaintiff was suffering from a bruise on the hip.

His Lordship: And not a fracture?—No, my lord. Independently of witness, Dr. Mateer agreed that the injury was a contusion of the hip. Witness described his treatment of the case. He would not, he thought, have certified that the man was suffering from sciatica, but would have stated that the injury was due to a contusion of the hip. He treated the plaintiff to the best of his skill and knowledge.

By Mr. Thompson.—Anyone might have mistaken the fracture for a contusion of the hip, and all that he saw throughout the case was consistent with the diagnosis.

Dr. Charles A. Mateer was also examined at considerable length.

Dr. Robert Campbell, a specialist in fractures, stated, in reply to Mr. Hanna, that he came to the conclusion that the man was suffering from a rare kind of fracture, in which the bone was fractured, but the outer membrane was unbroken. That was an exceedingly difficult fracture to diagnose.

Surgeon Kirk deposed to operating on the plaintiff in March last. The form of operation was one that was not taught in his student days, and to his surprise and horror he found that the place where he thought the break had been moved with the shaft perfectly well. On searching very carefully he detected a very rare form of fracture, which could not have been produced in the ordinary way. The treatment of Dr. Bryars and Dr. Mateer did not tend to prevent union. He believed the plaintiff would be fit for work after the operation.

Counsel on both sides having spoken, his Lordship summed up, and the jury, after a long absence, returned to court with a verdict for the defendants.

### Death Under Chloroform.

AT Southwark, Dr. F. J. Waldo conducted an inquiry with reference to the death of Phoebe Chart, aged 44, which occurred in Guy's Hospital while under the influence of chloroform.

Dr. Vincent Townrow said that the deceased woman was admitted on July 25th for an operation for cancer. Two days later she was placed under chloroform, and in the course of a few minutes she stopped breathing. Ether was injected into the heart, and through an incision made in the abdomen the surgeon massaged the heart, but there was no response.

Replying to the coroner, the witness said that only a competent medical man could have adopted these measures. A dentist could not resort to such a means of restoring animation. Witness added that death was due to heart failure due to the action of the anæsthetic on the cardiac muscles.

Dr. Francis Shipway, honorary visiting anæsthetist, said he gave the patient chloroform because she was stout, and ether would have been unsuitable. Chloroform was five times more dangerous than ether.

The coroner said that of forty-one cases of deaths under anæsthetics brought under his notice, thirty-three were due to chloroform. He observed that many of the deaths occurred before the operations were commenced.

The jury returned a verdict of accidental death, and added that every care had been taken at the hospital.

### Operation in Mid-Atlantic.

ON the recent arrival of the Cunard liner, *Mauretania*, it became known that an operation for appendicitis had been carried out on board during rough weather. A man employed in the stokehold, named Robert Gibbons, was taken ill suddenly, but did not discontinue his work until internal pains actually prevented him from passing forward the coal for the furnace. The ship's surgeon, Dr. Jones, was then called in, and found the man suffering from a dangerous attack of

appendicitis. Two eminent New York surgeons, Dr. W. B. James and Dr. F. T. Kinnicutt, chanced to be aboard, and Dr. Jones called them into consultation. They determined to operate at once, though the ship was pitching considerably in spite of her size under the violence of the sea. It was discovered that Gibbons had allowed his ailment to go too far before treatment, and the operation was therefore too late.

#### Prevention of Blindness.

AT Stoke-on-Trent, on July 28th, a meeting of representatives of local authorities, medical officers of health, and others was held, for the purpose of considering the best means of averting infantile ophthalmia. The Earl of Harrowby, chairman of the Sanitary Committee of the County Council, presided. Lord Harrowby explained the object of the meeting, and said that the question was one which had interested him to a great extent, more particularly as chairman of the Sanitary Committee of the County Council. They in the Potteries had taken the initiative in the prevention of infantile blindness. Of course, they could have wished that the question should be discussed throughout the county, but they were glad to find that in North Staffordshire they had taken the lead, and he hoped the result of their deliberations would be productive of great good. They could not fail to express their thanks to Mr. Greatbatch for having taken up that very important question. There were eighty-six blind children being educated in the county, and it was a very startling fact that of that number thirty-four would never have been blind if they had received proper attention immediately after birth. They were also told by the leading authorities that no less than 40 per cent. of the blind children of the country could have been cured if they had been properly treated a few days after birth. In view of the cost of educating the blind, it followed that at least £15,000 was lost annually in educating the thirty-four blind children in Staffordshire who might have been cured.

Dr. G. Reid proposed the following resolution: "That, in the opinion of this meeting of the Mayors, chairmen of Urban District Councils, and medical officers of health of the northern division of the county, the adoption by public health authorities of the Notification of Births Act (1907) is desirable. And this meeting is further of opinion that the disease known as ophthalmia neonatorum that is, inflammation of the eyes in new-born children, up to ten days old—should be added to the list of diseases compulsorily notifiable under the powers of the Infectious Diseases (Notification) Act, 1889."

#### High Peak Hospital and Diphtheria.

AT a meeting of the governors of the High Peak Hospital it was reported by the medical superintendent that without any previous notification to the authorities a patient from the New Mills district suffering from diphtheria had been brought to the hospital in an open conveyance, with a note from the medical man in attendance, who, resides in another district, asking that the case be admitted, as it was of an urgent nature. Miss Rowbottom, the head nurse, on going to the gates found that the patient was practically dying in the conveyance. Death took place several hours later.

The medical superintendent drew the attention of the governors to the fact that several cases of diphtheria had been sent to the hospital lately in a moribund condition, and pointed out the uselessness of conveying patients to the hospital under such circumstances.

In the course of discussion it was stated that the regulations had not been complied with, as the authority of the medical officer of the New Mills district ought to have been obtained, when the hospital ambulance would have been sent for the patient.

#### Sale of Poisons in Ireland.

THE Statutory rules approved by the Privy Council in Ireland in connection with the working of the Poisons and Pharmacy Act of last year have been laid on the table of the House of Commons. The following are the chief provisions of the regulations:—

A licence shall not be granted to any person unless the local authority are satisfied that he is fit by education and intelligence to be entrusted with the sale of poisonous substances, and has made suitable provision for the separate storage of the same in a distinct and separate part of his shop or building where he proposes to sell the same. In granting licences for the sale of poisonous substances for use exclusively in horticulture, preference shall be given to nurserymen, florists, seedsmen, and other persons, whose business is specially connected with horticulture. No licence for the sale of poisonous substances shall be granted to any person who is illiterate, or who is under the age of 21 years. All poisonous substances shall be kept by the licensee in a separate drawer, or cupboard, or closed receptacle, apart from other goods, and poisonous substances shall not be sold upon the same premises as articles of food for human consumption, unless the local authority are satisfied that convenient arrangements for their sale cannot otherwise be made, and in that case they must be sold at a separate counter. For the purpose of this regulation, a part of a counter which is shown to the satisfaction of the local authority to be adequately separated from the rest of the counter shall be treated as a separate counter.

A poisonous substance shall not be sold except in an enclosed vessel or receptacle, as received from the manufacturer, distinctly labelled with the word "poison," the name of the substance, the name and address of the seller, and the notice of the special purpose for which it has been prepared. Liquid preparations shall be sold only in bottles or tins, as received from the manufacturer, and such bottles and tins shall be so constructed as to bear the ordinary risk of transit without leakage, and to be easily distinguishable by touch from ordinary bottles or tins, and the word "poison" or "poisonous" shall be indelibly marked on each bottle or tin. Solid preparations shall be securely packed, and the package shall contain a notice that it must be destroyed when empty.

#### A Threatening Letter.

AT the Dublin Commission, before Mr. Justice Dodd, John Brownlow was indicted for having sent a threatening letter to Dr. W. R. Dawson, last July. The prisoner, who pleaded guilty, had been in the employment of Dr. Dawson, but his engagement having terminated, he declared he had become depressed. Dr. Dawson gave Brownlow an excellent character, and having entered into bail for his good behaviour for two years, the man was liberated.

#### One Medical Officer to 160 Patients.

AT Fulham Infirmary a lunatic was put in the padded room, and next day he was found there dead. At the inquest the medical superintendent said the night porter left a note for him asking him to see the patient, but he did not get it. His staff was not large enough for a doctor to take night duty. There was one doctor to 160 patients, and a large workhouse, with 780 inmates, to look after as well. In finding that death was due to syncope from delirium tremens, the jury recommended that every case admitted should be seen by a doctor immediately.

#### Slaughter-Houses.

THE following Memorial has been presented by the Humanitarian League to the Right Hon. John Burns, M.P., President of the Local Government Board:—

SIR,—In view of the fact that it is over four years since the Committee appointed by the Admiralty to consider the Humane Slaughtering of Animals reported strongly in favour of replacing private slaughter-houses by public abattoirs; that the same course was advocated in the Report of the Royal Commission on Tuberculosis in 1896, and has been urgently recommended by the Public Health Committee of the London County Council and by a number of leading medical and sanitary authorities; and that London is in this respect far behind the great majority of continental cities, and not a few provincial ones, such as Glasgow and Edinburgh; we desire to appeal to you to take

the necessary steps to give effect, in the Metropolitan district, to this much-needed but long-delayed reform.

Among the signatories are the following eminent members of the medical profession:—

Sir James Crichton-Browne, M.D., D.Sc., LL.D., F.R.S.

Sir Thomas Barlow, Bart., M.D., D.Sc., F.R.C.P., etc.

Sir Samuel Wilks, Bart., M.D., LL.D., F.R.S., etc. (Consulting Physician to Guy's Hospital).

Sir Jonathan Hutchinson, F.R.S., F.R.C.S.

J. Mitchell Bruce, Esq., M.A., LL.D., M.D., F.R.C.P.

James Cantlie, Esq., M.B., F.R.C.S.

Alex. Hill, Esq., M.A., M.D., F.R.C.S., J.P.

Alex. Haig, Esq., M.A., M.D.

Sir Arthur Conan Doyle, M.D.

The Medical Officers of Health for Bermondsey, Deptford, Fulham, Greenwich, Hackney, Hampstead, Holborn, Islington, Lambeth, St. Marylebone, Shore-ditch, Southwark, Stepney, Stoke Newington, and Woolwich.

#### Hospital Entertaining Expenses.

In May last the Executive Committee of King Edward's Hospital Fund appointed a sub-committee to consider and report as to what action, if any, it might be advisable for the Fund to take in reference to the question of the expenses of charity entertainments.

Lord Richard Cavendish was elected chairman, the other members being Mr. J. G. Griffiths and Mr. A. E. Sydney, with Mr. F. M. Fry. Five meetings were held by the committee, and a great deal of written and oral information was submitted to them.

In considering the evidence the committee kept in mind the following questions:—(1) Are entertainments a valuable method of raising money for a hospital? (2) Is there at present any widespread tendency to extravagance or abuse in connection with this means of raising money? (3) In what way can the hospitals best guard themselves and the public against the danger of waste or abuse without depriving themselves of a source of income?

Upon the first question the committee report that there can be no doubt that the practice of charity entertainments for hospitals has established itself as one of the recognised methods of raising funds, and that they have been found to be a means of securing income which could not be obtained in any other way.

Upon the second question they are glad to be able to report that the evidence before them points to the conclusion that neither extravagance nor abuse prevails to any large or general extent. They came, however, upon isolated instances which indicated the existence of certain dangers in this direction, and they make a number of suggestions by which this can be avoided. If the hospital itself is responsible for the management of the entertainment, the probable relation of the expenses to the receipts needs to be carefully considered, and the committee emphasise the necessity of forming detailed estimates beforehand. Mention is made of a rule which is in force in some hospitals, that permission to use the name of the institution is only granted where the governing body has a voice in the management of the entertainment, and the stipulation that all accounts for expenses should be paid by the hospital secretary or that all cheques should be countersigned by a representative of the hospital.

They mention, however, some classes of expenditure which may in some cases have to be specially considered when estimates are being formed or accounts are being examined. The cost of the services of professional artists is one of these. The extent to which members of the dramatic, musical, and kindred professions give their time and skill gratuitously and ungrudgingly to the assistance of charity is a matter of common knowledge. But, at the same time, it is occasionally necessary for hospital committees to see that the deservedly high reputation of the professions in this respect is not used by less scrupulous or less public spirited persons as a cloak for individual profit, and that no undue proportion of the money intended

for the benefit of the hospital goes in "travelling" or other "expenses" attributed to artists. In the case of balls, where refreshments are necessarily included in the price of tickets, the giving of complimentary tickets should be carefully controlled.

#### The University of Liverpool.—The William Mitchell Banks Memorial Lecture.

THE fifth William Mitchell Banks Memorial Lecture was delivered in the University of Liverpool by Dr. Harvey Cushing, of the Johns Hopkins University, on Wednesday, August 4th, the Lecturer taking as his subject, "Recent Observations on the Pathology and Surgical Treatment of Intracranial Tumour." He referred in particular to the results of palliative and radical operations performed during the previous ten months on sixty-four cases. He detailed first the symptomatology of the affection, and drew particular attention to the alterations in the fields of vision and of colour vision as among the earliest observable phenomena. In dealing with the morbid anatomy, he went into detail regarding the experimental work which had been done to demonstrate the functions of the pituitary body, and showed how over-action was associated with the phenomena termed acromegaly and under-action with a characteristic form of obesity and sexual infantilism. He described a case of removal of the pituitary body from an acromegalic. In the third place he demonstrated, by numerous lantern illustrations, the methods of operative technique which were employed in his clinic. The lecture was closely followed and much appreciated by a numerous attendance of medical men and students, and at the close their thanks were accorded to the lecturer by Dr. Monsarrat, the Dean of the Medical Faculty, who presided.

#### Anæsthetic and Death.

WATKIN RICHARDS (32), of Pentrebach, Merthyr, died suddenly whilst an anæsthetic was being administered. On February 5th, whilst working in Hill's Plymouth Colliery, he sustained an injury to his thumb. Mortification subsequently set in, and, after a consultation with his medical attendant, it was decided that an operation should be performed. Dr. Pryce and his assistant, Dr. Twobig, went to deceased's house with the object of performing the operation, and deceased, whilst an anæsthetic was being administered made some remarks and died suddenly.

#### Royal College of Surgeons in Ireland.

THE following candidate has passed the Primary part of the Fellowship Examination, J. B. Dordi, L.M. and S., Bombay Univ., and the following candidates having passed the Final part of the Fellowship Examination were admitted Fellows: J. Gordon, L.R.C.S.I.; L. S. Machado, L.R.C.S., Edin.; T. Murphy, B.Ch., Melbourne Univ.; and F. Spicer, M.R.C.S., Eng.

#### Indian Medical Service.

OF forty-eight candidates who underwent examination on Saturday last for 21 Commissions in the Indian Medical Service, the following were successful. These will be appointed lieutenants on probation in the service. The highest possible number of marks obtainable was 5,100:—

C. H. Smith, 3,997 marks; A. M. Dick, 3,840; T. J. C. Evans, 3,733; R. J. Binning, 3,712; M. J. Holgate, 3,512; J. McD. Eckstein, 3,503; T. L. Bomford, 3,471; W. A. M. Jack, 3,433; G. R. Lynn, 3,412; L. H. L. Mackenzie, 3,404; A. C. Anderson, 3,385; D. G. Cooper, 3,366; W. L. Forsyth, 3,333; K. S. Thakur, 3,288 (Punjab); M. A. Rahmar, 3,281 (Bombay); F. J. Kolaporewalla, 3,258 (Poona); H. R. B. Gibson, 3,257; D. Arthur, 3,252; E. H. V. Hodge, 3,225; G. T. Burke, 3,187; R. H. Bharucha, 3,143 (Bombay).

#### Apothecaries' Hall of Ireland.

THE following have passed the Quarterly Examinations:—1st Professional.—Simon Carroll, Joseph A. Moloney. 2nd Professional.—George M. Mayberry. Final professional.—Edward Murphy, James Stuart.

## NOTICES TO CORRESPONDENTS, &c.

Correspondents requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

### SUBSCRIPTIONS.

SUBSCRIPTIONS may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s.; post free at home or abroad. Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially-appointed agents. Indian subscriptions are Rs. 15.12. Messrs. Dawson and Sons are our special agents for Canada.

### ADVERTISEMENTS.

For ONE INSERTION:—Whole Page, £5; Half Page, £3 10s.; Quarter Page, £1 5s.; One-eighth, 12s. 6d.

The following reductions are made for a series:—Whole Page, 13 insertions, at £3 10s.; 26 at £3 3s.; 52 insertions at £3, and pro rata for smaller spaces.

Small announcements of Practices, Assistantcies, Vacancies, Books, &c.—Seven lines or under (70 words), 4s. 6d. per insertion; 6d. per line beyond.

ORIGINAL ARTICLES OR LETTERS intended for publication should be written on one side of the paper only and must be authenticated with the name and address of the writer, not necessarily for publication but as evidence of identity.

CONTRIBUTORS are kindly requested to send their communications, if resident in England or the Colonies, to the Editor at the London office; if resident in Ireland to the Dublin office, in order to save time in reforwarding from office to office. When sending subscriptions the same rule applies as to office; these should be addressed to the Publisher.

ANESTHETICS.—It seems to us to be impracticable to shut dentists out. One cannot suppose that the Legislature would pass a Bill making it illegal for registered dentists to give gas. The ideal, of course, is that no one not fully qualified medically should do so, but public opinion is not yet ripe for that proposal. The number of deaths from nitrous oxide is very small but there are no statistics available to show the percentage for private practice.

YORKSHIRE.—We know the work to which you refer in the French language only, no English translation has come under our notice. Messrs. Baillière, Tindall & Cox having connections in Paris could probably satisfy on the point.

### A "RESURRECTION" STORY.

In connection with the statement made by Professor Pepper before the Departmental Committee on Coroners' Inquests that "nearly all the cases of reported live burial were myths," the *Daily News* relates a story which it believes to be perfectly authentic, and may be new to our readers. It is the story of a clergyman's wife in the County Cork, who was buried as dead many years ago. The night after the funeral a thief, who was aware that the lady was buried with a valuable ring on her finger, opened the grave, broke the coffin, and endeavoured to remove the coveted ring. Being unable to secure the ring otherwise, the ghoul drew a knife and cut the finger. Instantly blood flowed from the wound, and the lady, who had been in a trance, rose in the coffin, the man running away as one demented. Then the lady walked to her husband's house, where she was received with equal amazement and delight. She recovered completely.

H. S.—You are quite right to ask for a fee under the circumstances, but it is bad policy with an office of good standing to do so before giving a report. You can safely trust them. Send a detailed and conscientious report with your opinion and they will be only too glad to pay you a guinea.

M.B. CANTAB.—Yes, you have a right to call yourself "Dr." everywhere except in the precincts of the University. This is part of the University statutes and was passed when an examination for the degree of M.B. was instituted. The condition holds good for no other University, but there is no reason why you should not avail yourself of the right. If Cambridge M.B.'s do not customarily call themselves "Dr." their ancient right will fall into desuetude.

MR. WINTON.—The one is a natural corollary of the other and should follow in due course.

### A QUESTION IN COMPARATIVE PATHOLOGY.

A CORRESPONDENT has sent us the following query. Can any of our readers throw any light upon the subject?

SIR.—Being in a part of the country which is over run with rabbits, I have been helping my young nephews in their efforts to keep down these troublesome little animals. A fair proportion of the young rabbits have been condemned at sight by the cook—a woman experienced in country lore. In proof of her diagnosis she deftly excised the liver in all cases, and showed an organ studded with pearly white, firm nodules, like early tubercle. The creatures were more or less wasted, according to the stage of the disease. I am told that wet is a predisposing factor. Can anyone tell me what this malady is likely to be, and whether the country people are right in rejecting such animals for food.

I am, Sir, yours truly,

URBS IN RUPE.

August 6th, 1909.

DR. L. (Liverpool).—Your communication to hand while "at press" will be referred to in our next.

DR. A. E. G. (Manchester).—It would have been wiser to send in the notice at the earliest moment, but probably nothing further will be heard of the matter, now that an explanation has been given.

## Appointments.

BRIIGGS, WALTER, M.B., B.S.Lond., M.B., Ch.B.Vict., Honorary Assistant Surgeon to the Blackburn and East Lancashire Infirmary.

CLARK, HILDA, M.B., B.S.Lond., House Surgeon at the Maternity Hospital, Birmingham.

CLARKE, J. MICHELL, M.D.Cantab., F.R.C.P.Lond., pro-Vice-Chancellor of the University of Bristol.

GRAY, L., M.R.C.S., L.R.C.P.Lond., Certifying Surgeon under the Factory and Workshop Act at Stafford.

HICKS, J. A. BRAXTON, M.B., B.S.Lond., Pathologist to the Seamen's Hospital (Dreadnought), Greenwich, S.E.

MONTGOMERY, E. C., M.R.C.S., L.R.C.P.Lond., Certifying Surgeon under the Factory and Workshop Act for the Maidenhead District of the county of Berks.

ORMEROD, J. A., M.D.Oxon., F.R.C.P.Lond., Registrar of the Royal College of Physicians of London.

ROBINSON, ARTHUR, M.D., C.M.Edin., Professor of Anatomy in the University of Edinburgh.

SCOTT, DAVID HART, L.R.C.P. and S.Edin., L.F.P.S., L.M.Glasg., District Medical Officer by the Tiverton (Devon) Board of Guardians.

STALKER, WILLIAM STEWART, M.B., Ch.B.Glasg., Assistant Medical Inspector of School Children by the Wiltshire Education Authority.

SUTTON, HENRY MARTIN, L.R.C.P.Lond., M.R.C.S., L.S.A., District and Workhouse Medical Officer by the Truro (Cornwall) Board of Guardians.

WALTER, E. C., M.R.C.S., L.R.C.P.Lond., Certifying Surgeon under the Factory and Workshop Act for the Wallingford District of the county of Berks.

## Vacancies.

Whitehaven and West Cumberland Infirmary.—Resident House Surgeon. Salary £120, with board and lodging. Applications to Wm. H. Sands, Secretary, Whitehaven.

Borough of Colchester.—Urban District.—Medical Officer of Health and Public Analyst. Salary £550 per annum. Applications to H. C. Wanklyn, Town Clerk, Town Hall.

Hamlet of Mile End Old Town.—Assistant Medical Officer. Salary £150 per annum, with board, lodging, and washing. Applications to Benjamin Catmur, Clerk to the Guardians, Guardians Offices, Bancroft Road, Mile End, E.

Borough of Leigh.—Medical Officer of Health. Salary £400 per annum. Applications to Stanley Wilson, Town Clerk, Town Hall, Leigh, Lancs.

University of Birmingham (Faculty of Medicine).—Professor of Anatomy. Salary £800 per annum. Applications to Geo. H. Morley, Secretary.

Nottingham General Dispensary (Branch).—Assistant Resident Surgeon. Salary £160 per annum, with apartments, attendance, light and fuel. Applications to C. Cheesman, Secretary, 12, Low Pavement, Nottingham.

Manchester Hospital for Consumption and Diseases of the Throat and Chest.—Assistant Medical Officer. Salary £100 per annum, with board, apartments, and laundry. Applications to C. W. Hunt, Secretary, Hardman Street, Deansgate, Manchester.

Southwark Union, London.—Assistant Medical Officer at their Infirmary, East Dulwich Grove, S.E. Salary £100 per annum, with board, lodging, and washing. Applications to Sydney Wood, Clerk, Union Offices, John Street West, Blackfriars, S.E.

## Births.

CLAPHAM.—On Aug 4th, at 10, Carlisle Road, Hove, Brighton, the wife of Roderick Arthur Clapham, M.A., M.D., of a daughter.

## Marriages.

FIELDING—OXENHAM.—On Aug. 5th, at St. Mary's, Lewisham, Saville James, second son of Dr. and Mrs. Fielding, of Norwich, to Grace Horswill, elder daughter of Mr. and Mrs. Edward H. Oxenham, of Catford.

STEPHENSON—LAWRANCE.—On Aug. 3rd, at Great Ayton Parish Church, William Stephenson, M.D., F.R.C.S.E., Professor, University of Aberdeen, to Alice Irene, third daughter of the late James Lawrance, Esq., of Melbourne.

## Deaths.

GUILLEMARDE.—On Aug. 7th, at Eltham, Kent, in his 64th year, Arthur George Guillemard, of Eltham, and 3 Arlington Street, London, third son of the late J. Guillemard, Esq., M.D., of Eltham.

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# IRISH POOR-LAW AND LUNACY INTELLIGENCE,

Being the Supplement to the "Medical Press and Circular."

WEDNESDAY, AUGUST 11TH, 1909.

## Notice to Correspondents.

Poor Law Medical Officers and other subscribers to THE MEDICAL PRESS AND CIRCULAR are invited to make use of the facilities provided by the Management of the Journal for obtaining information on all matters connected with the Poor-Law Medical Service or the Medical Profession generally in Ireland.

The Editor will be glad at all times to receive letters or marked copies of newspapers dealing with matters of medical interest. All communications must be addressed to the Office of the Journal, 18 Nassau-street, Dublin, and should be delivered not later than Saturday morning to ensure attention in the issue of the following week.

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## EVENTS OF THE WEEK.

THE Journal of the Irish Medical Association for August is chiefly concerned with letters from four correspondents. Three of them are concerned with the letters of Drs. Powell and Crinion which appear in the number for July, and we are glad to note that they emphatically condemn Dr. Crinion's attempt to introduce sectarian discord into the working of the Association. Regrettable as his action was, that of the Hon. Secretary and Editor in publishing this letter is more so. He knows that sectarian matters are excluded, and that their introduction would be prejudicial to the interests of the Association. Dr. Powell's letter is on an entirely different plane, it would have been better if he had omitted imputing motives. Imputations of that sort so far from strengthening, tend to weaken his case, but it's a perfectly fair question for discussion whether a special Parliamentary Committee is preferable to the Committee of Council, whether such a Committee should be chiefly composed of Poor Law Medical Officers.

The government of the Committee of Council has not been too successful in the past, nor as long as the present system exists, which necessitates its being composed almost exclusively of Dublin men, can it hope to have the unquestioned confidence of the Association. Whether, however, a Parliamentary Committee similarly limited as to constitution, would yield better results and command the confidence of the country members is doubtful.

Undoubtedly reform of the Poor Law and Medical Charities Services is of supreme interest to the medical officers, but it is of no less importance to the profession at large and the general public, and we think that the Committee of Council is quite as capable of enlightened insight into the problems involved as the Committee, whose decrease by lapse of time and not by Dr. L. Kidd's sacrilegious hands, Dr. Powell laments.

Furthermore, as Dr. Olpherts points out the Irish Medical Association is not a Poor Law Medical Association. Under the influence of its officials and *Journal* it has assumed that role and lost ground accordingly with the majority of the profession.

We concur with Dr. Powell, though from an entirely different point of view, that the "Poor Law Medical Officers will have no one to blame but themselves if they go on subverting their interests to the Irish Medical Association." They should look after, and take care of, their own interests themselves, and not ask the Association to do so for them; its function is to bring to the aid of individual medical men, Poor Law and other Officers, the weight of the influence and opinion of the entire profession when needed, in support of their righteous aspirations.

We report in another column the references of the Local Government Board to the claim of Dr. Dillon on the Listowel Guardians for for consultation in a midwifery case. Passi-



over the very doubtful interpretation placed by the Local Government Board on the cases of Flood v. Ballyshannon Guardians, and Olpherts v. Downpatrick Guardians, the position they take up as regards the liability of the Relieving Officer is peculiar in the extreme. "Heads, I win; tails, you lose." The Relieving Officer has not the power, they say, to pledge either his own credit or that of the Guardians. Therefore, any bargain he makes is without force. However, the statutory duty is put on the Relieving Officers to provide a consultant when required. It is for the consultant to make the bargain, and obviously if the Relieving Officer is, by direction of the Local Government Board, to disclaim all responsibility, then it will be necessary to demand payment in advance. Medical men cannot be coerced either by Boards of Guardians or a Government department into working for insufficient fees.

His many friends will have learned with sorrow of the death of Dr. Robert Kenny, one of the Medical Officers of the North Dublin Union. Though by no means an old man, Dr. Kenny had failed much in health since his wife's death a few months' ago, and when he contracted pneumonia a couple of weeks ago, he made but little stand against it. For many years Dr. Kenny, like his brother, the late Coroner of Dublin, took an active interest in politics, though, unlike his brother, he did not enter Parliament. Although a strenuous politician, he had friends in every party, for his kindness and humour won the affection of all who knew him. As Medical Officer of the North Dublin Union he was much beloved by the poor, whom he treated with characteristic humanity. On more than one occasion he successfully defended against the niggardliness of the Guardians his management of the wards in his charge. It will be long before his friends forget "Bob" Kenny's genial face and kindly spirit.

#### BANBRIDGE UNION.

Some weeks ago the Banbridge Board of Guardians adopted a resolution limiting the holidays of the Dispensary Medical Officers to two weeks, and fixing the remuneration of the *locum tenens* at three guineas per week. On receipt of the minutes of the meeting at which the resolution was agreed to, the Local Government Board wrote down asking them to re-consider their decision, and allow the doctors the full term of four weeks' vacation, and to remunerate their substitutes at the rate hitherto paid, viz., four guineas weekly. The discussion which ensued on the reading of this communication, was prolonged, and, at times considerably heated, but eventually the resolution was rescinded, and the suggestion of the Local Government Board acceded to by a majority of 35 to 4. At a subsequent meeting a letter was read from the Local Government Board sanctioning the arrangement. At the same meeting, Dr. James Moag, Medical Officer of the Loughbrickland Dispensary District, wrote, applying to the Guardians to grant him four weeks' leave of absence, and stating that Dr. Chancellor Banbridge, Medical Officer of the Union Workhouse, would as his *locum tenens* at £4 4s. per week. A number of Guardians objected to the medical officer nominating his *locum tenens*, and contended that the Board should have the right to make the appointment, which, it was also contended, should go round all the doctors in the Union in turn, and after a lengthened discussion on the matter, it was eventually decided by 10 votes

to four, that Dr. Boyd, Banbridge, be appointed as *locum tenens* during Dr. Moag's absence at the rate of four guineas per week. We hope and trust, however, that Dr. Boyd will not allow himself to be made a catspaw of by a few ill-grained Guardians for the purpose of sowing discord amongst the medical officers and that by informing the Guardians there are many and cogent reasons why a dispensary doctor should be allowed to select his own *locum tenens* to whom he must, at least, in all rural districts, hand over the care of his private patients, he would let them understand that it is in the interests and for the convenience of all concerned that the doctor's nominee should have the refusal of the position. Such a refusal on his part will, we have no doubt, place him on a higher plane with his professional brethren, and support that doctrine of combination, the exercise of which eventuated in the passing of the resolution which did us much, it not more, for the substitutes as it did for the medical officers themselves. o

#### IRISH MEDICAL MATTERS IN PARLIAMENT.

LUNACY IN IRELAND.—In answer to Mr. Vincent Kennedy, who quoted from the report of the Inspectors of Asylums in Ireland, Mr. Birrell stated that he had seen the statement referred to. He was informed by the inspectors of lunatics that in 1880, when the population was estimated at 5,202,648, the number of lunatics under care in Ireland was 12,982, and that in 1908, when the estimated population was 4,371,436, the number of lunatics under care was 23,931, an increase of 10,949. The increase had been continuous, but had tended somewhat to fall off in recent years. In England the increase in the registered insane between 1880 and 1907 was 52,971. In Scotland the increase between 1880 and 1908 was 8,185. The Government had had before them a report dealing at length with the causes which, in the opinion of the inspectors, had contributed to swell the numbers of insane in institutions in Ireland. This report was presented to Parliament in 1906 (Cd. 3126).

#### THE TUBERCULOSIS PREVENTION ACT.

The recent discussion which took place at the Dublin County Council relative to the proposed adoption of the Tuberculosis Act may be taken as a fair sample of what is to be expected all over the country. The Dublin County Council is certainly as progressive a body as, if not a more progressive body than, most of the other County Councils, and it is a bad portent for the success of the Act when this Council has postponed its adoption for a year. We report the discussion in full as it is of importance, and as it may help those who are trying to bring about the adoption of the Act by showing the points which have to be met:—

A memorandum relating to the objects of the Tuberculosis Prevention Act, 1908, was submitted.

Mr. Shannon, solicitor, explained some of the provisions of the Act, and pointed out that the sanitary authorities throughout the county could adopt the Act with the consent of the County Council. The matter came before the meeting in connection with a communication from the Kingstown sanitary authority, who had decided to adopt the Act subject to the approval of the County Council. It would be for the Council to consider whether they would approve or not.

Mr. Hannon asked if a person were pronounced to have tuberculosis was that person to be banished for life from society and from his friends. He thought that that was the meaning of the Act.

The Chairman said that the patients would be as well and as humanely treated as possible, and the public at large would be saved from the possibility of contagion by contact with those who were affected.

Mr. Hewson said that the chairman was presuming that they had a county sanatorium.

Mr. Hannon stated that everything was presumption.

Mr. Graham asked in the case of the bread-winner of a family who might be pronounced to have the disease, and might in consequence be removed, was there any remuneration or any means of support for his family.

Mr. Hewson thought that before adopting the

provisions of the Act, or giving sanction to their adoption, in any part of the county they should see how the dispensary system was working, and not adopt suddenly an Act which might cast out the bread-winners of the people without any place to keep them except under the Poor Law system.

Mr. Collins said the people wanted education before anything was done. At present it looked as if the Act would be a great hardship on the poor.

Mr. Bunbury said if the people of Kingstown were consulted 90 per cent. of them would oppose the adoption of the Act. At a recent meeting of the Ratepayers' Association a resolution to that effect was adopted, and a deputation was appointed to wait on the County Council.

The Secretary then read a resolution which had been sent by the Kingstown Municipal Reform Association disapproving of the adoption of the Act, and stating that it would be injurious to Kingstown as a health resort, and would also be a hardship on the poor.

Mr. Collins thought that the country had been injured by the agitation that had been carried on.

Mr. Mooney suggested that the matter should be postponed, so that they might have an opportunity of fully considering the matter.

Mr. Hannon said there was no provision to meet the requirements to put the Act in force.

The Chairman said that even when the Act was in operation there was no power to remove a person against his will.

Mr. Hewson said there was every power to order patients to be removed, and to order the disinfection of premises.

Mr. Baggot said that if the clauses were put into force they would practically brand the people as lepers.

It was ultimately agreed to receive the deputation from the Kingstown Municipal Reform Association which consisted of Messrs. O'Curry, Gilmartin, and Weir. The deputation protested against the adoption of the Act on the ground that it would ruin Kingstown as a health resort.

The members of the deputation having retired.

Mr. Mooney stated that he was of opinion that it would be desirable to postpone the matter. It would place Kingstown in an invidious position if the Act were put in force there and not in any other part of the county. If adopted by the County Council, it would be well that the Act should be given to several places at the same time.

Mr. Hewson did not wish to be taken in opposition to the noble woman who had spent the greater part of her life in benefitting the poor of Ireland.

It was finally decided to postpone the consideration of the matter for twelve months.

At a recent meeting of the North Dublin Guardians the following resolution was passed unanimously:—

"That the Council refuse to put in force the Tuberculosis Prevention (Ireland) Act, 1908, until there is in existence a suitable, fully-equipped sanatorium, capable of accommodating all the patients sent in from the North County Dublin; that the Government provide State aid to same, as in other countries where a similar Act is in force, for families who may be deprived of their bread-winner, and not force whole families into pauperism and to become a burden on the ratepayers; that the Government be asked to pass a Bill dealing with this matter."

#### FEE FOR CONSULTATION.

At the last meeting of the Listowel Guardians, a letter was read by the assistant clerk (Mr. D. O'Connell), from the Local Government Board, stating they had under consideration the claim of Dr. J. T. Dillon for a fee of £5 for professional assistance rendered by him in a midwifery case of the acting medical officer of the Tarbert Dispensary District, and in reference thereto the Local Government Board had to point out that it was decided by the High Court of Justice in the case of Flood v. Ballyshannon Guardians, and also in the case of Olpherts v. Downpatrick Guardians, that the Boards of Guardians were not legally liable for any greater remuneration of a medical practitioner employed

under Article 21 or Article 22 of the Dispensary Regulations than that prescribed by Article 23. As appears from the latter cases, it had not yet been decided whether Guardians were liable for medical attendance on the destitute poor persons relieved under Section 7 of 10 Vic., cap. 31. The Board did not consider that the relieving officer could be personally liable for the consultant's fee where he was acting in his official capacity to the knowledge of the medical practitioner employed.

#### TYPHOID AND CREAMERY MILK.

At a recent meeting of the Thurles Guardians, the Local Government Board, in forwarding Dr. Browne's report regarding the outbreak of enteric fever at Currahaha and vicinity, in the Borrisoleigh Dispensary District, pointed out that the occurrence emphasised the necessity for close supervision over the sources of the public milk supply by careful administration of the Dairies, Cowsheds, and Milkshops Order, 1908, and suggested to the Council the desirability of their making a joint appointment of a veterinary surgeon in conjunction with the Thurles Urban Council for the purposes of the Order, in which event the expense on each Council would not be serious.

Dr. Browne, in his report, after going into the details of each case, stated:—In all, up to the present, there have been twenty-three seizures. The only circumstance in common to all is the milk supply from the creamery at Currahaha. None of the families attacked used the same water supply. No suspicion is attached to the water used for dietetic purposes by any of the families, but the water used for washing the milking utensils in some instances was subject to contamination. The water supply used at the creamery is taken from a stream, and is liable to pollution. The milk from the affected farms was being sent to the creamery up to the time the medical officer first saw the patients. The manager of the creamery informed me that the milk was always sterilised before being returned to the customers, and was heated to a temperature of 195 degrees, and kept at this temperature for some minutes. However, I consider that all the circumstances point to the creamery separated milk as the source of the infection.

Dr. Browne said since he had written the foregoing report he was sorry to say there had been a good many more cases—28 in all, and there were twelve or thirteen in the Nenagh Union, which would bring the total up to 40. If they had a proper supervision over the milk supplies, as the Dairies Order enabled them to have, this outbreak might have been avoided. He was afraid the farmers did not always wash their milking utensils with clean water. In several instances he found they were washed in sinks where ducks and geese had recourse.

We understand that the epidemic is still spreading, fresh cases having occurred.

#### CARRICK-ON-SUIR UNION.

At the weekly meeting of the Carrick-on-Suir Board of Guardians, an application was read from the five medical officers of the Union for increased salaries. This was the tenth time within the past two years the doctors have applied for increased salaries. On each occasion the application has been marked "read."

Mr. Thomas F. Morrissey, who all along has been active in opposing the doctors' application, now moved that the application be marked "read," as there was at present a resolution on the books deferring the consideration of the doctors' application for increased salaries until some action is taken by Parliament as regards the Poor Law Commission's report.

The application was marked "read" without further discussion.

#### LONGEVITY IN SHILLELAGH.

Dr. Brady of Carnew has written to the Shillelagh Guardians thanking them for granting him an increase of salary. He desired, however, to point out that according to the graded scale adopted by the District Council, an officer would require to serve for eighty years before obtaining the maximum salary of £35

fixed for the position of medical officer of health, and he would ask the Council to be good enough to reconsider the scale of increments in that case.

No order was made.

Even in Shillelagh eighty years' service is too much to expect.

#### ADMISSION TO WORKHOUSE HOSPITAL.

The Local Government Board has written to the Clogheen Guardians in reference to the case of Mrs. Neathery stating that it appeared that the woman went to consult Dr. Walsh, and he, owing to the urgency of the case, recommended her admission to hospital; her husband, a small farmer, guaranteeing cost of treatment and maintenance. The Master refused her admission, and she became seriously ill. She was admitted next morning on an order from the Relieving Officer, but subsequently died, her death, it was alleged, being accelerated by the delay in her admission. The Master maintained that he had acted properly. The Local Government Board requested that the attention of this officer be called to Article 64 (1) of the Workhouse rules, from which it would seem to be his duty "to admit paupers into the Workhouse in obedience to any order made under Article 1, and

also persons applying for admission who may appear to him to require relief through any sudden or urgent necessity." All such admissions should be reported to the Guardians, who would decide whether the person was to continue in the house or not. The duty cast on the Master was analogous to that imposed on the Relieving Officer, who was responsible for offering immediate relief in all cases of sudden and urgent necessity until next meeting of the Guardians, though it may subsequently be found that the parties may not be properly relievable by the Guardians. It was clear, therefore, when a poor person, dangerously ill, seeks admission, the Master should admit him.

On the motion of Mr. Heffernan, seconded by Mr. Galvin, an order was made pointing out to the Local Government Board that Mrs. Neathery could, in no sense, be considered a poor person. Her husband had a comfortable house and 57 acres of land valued at £43 10s. Consequent on the letter of the Local Government Board of March 2nd, which stated—"That they (paying patients) can be admitted only by the Board of Guardians," an order was made on the Master and other officers, referring them to this letter. The officials on this occasion only carried out the directions of the Guardians in accordance with the Local Government Board's rules.

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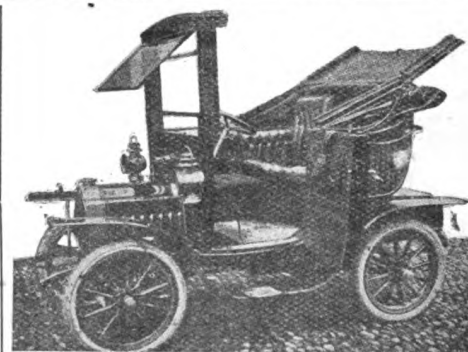
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# THE MEDICAL PRESS AND CIRCULAR.

"SALUS POPULI SUPREMA LEX."

VOL. CXXXIX.

WEDNESDAY, AUGUST 18, 1909.

No. 7.

## NOTES AND COMMENTS.

**The Annual Representative Meeting of the B.M.A.** The Annual Representative Meeting of the British Medical Association, judging from the published report, proved a great success. A number of important matters were discussed and a free interchange of opinions

took place, with the result, in some cases, of resolutions that cannot fail to be of future value as a more or less authoritative pronouncement of medical views. The finances of the Association came under review. One speaker pointed out that in 1900, with an income of £43,263, there was a surplus of £6,272, whereas in 1909, after omitting the capitation grants to the Branches, the income was £49,736, or more than £6,000 a year increase, and there was a surplus of only £732. That members get good value for their money must be generally admitted, but a solid reserve fund should not be altogether impossible, with a progressive income. The members cost nearly £50,000 per annum.

Mr. Mooney stated that he was of the opinion that it would be desirable to postpone the matter. It would place Kingstown in an invidious position if the Act were put in force there and not in any other part of the school. If adopted by the County Council, attention. Among other points, it was agreed that the special officer should be School Medical Officer, and not Assistant Medical Officer of Health, and the payment by fixed salary approved, with capitation grants in sparsely populated districts. Further, payment per child was generally disapproved; when necessary a minimum sum of not less than 2s. 6d. was suggested.

**Treatment of defective school children brought forth a crop of resolutions of vital importance to general practitioners.**

The reference of such patients to public medical charities was disapproved, and it was resolved that they ought to be sent to registered medical practitioners. The underlying feeling, and a quite legitimate and proper one, was that defective school children should be treated by medical men, who should be paid at a fair rate for their services. In this way the meeting definitely and specifically opposed the reference of such patients to the Poor-law. A resolution was passed suggesting that in case of guardians or parents unable to pay proper fees for defective children, a voucher should be issued by the local authority empowering treatment at fixed fees by any available medical practitioner. By an overwhelming majority (108 votes to 8) the principle of school clinics was approved in towns, as convenient places where treatment could be carried out by private practitioners. So far as the metropolis is concerned,

the action of the Education Committee in making arrangements with certain London hospitals was disapproved. Some of the other points that occupied the attention of the meeting will be touched upon in this column at a later date.

### **A Water-Cure.**

WELSH "revivals" have been somewhat in the background of late years, but lest anyone should consider that the quality of faith is lacking in that section of the Celtic fringe, a real miracle has been supplied of late to show that credulity is not dead. A certain Elizabeth Bleasdale, having three years ago damaged her thigh by a fall, was informed by the doctor that she had a "tuberculosis hip," and though everything possible had been done for her, she failed to get relief. A week ago she went to Holywell and bathed in St. Winifride's well, having to be carried into the water for the purpose. "Immediately on leaving," she said, "she felt the hip flowing easy," and in a few days was able to discard her crutches and an iron splint she wore. Dr. B. the next day she walked five miles, and now all she feels is slight stiffness of the joint, which causes a "hardly perceptible limp." The priest in charge of the well told her it was no use her bathing unless she had faith in its properties, and she declared she had faith that she would be cured. Now she proposes to go every year to bathe, as she is sure that in this way the cure will be permanent. With all sympathy with journals that have to tide over a silly season, we think we might be spared such stuff as this.

### **Hard-Earned Increment.**

THE "unearned increment" is much to the fore just now, and on the political side of the question we have, of course, nothing to say, but that ingenious disputant, Mr. Harold Cox, who occupies the uncomfortable position of a Free Trader who is opposed to land taxation, has been trying to defend the increment value which accrues to a ground-landlord by the increasing density of population on his ground, by arguing that he (the landlord) is as much entitled to the untaxed benefit of this increase as a medical man whose practice is increased by growth of population in his neighbourhood. Without arguing about the rights and wrongs of the landlord, we must say we stand aghast at the analogy. A medical man with free choice of a neighbourhood to practise in naturally chooses a growing one, and if his judgment is justified by the event and his *clientèle* increases, he naturally makes a larger income. But every penny of that income is earned by the sweat of his brow, and not a farthing comes in that

is not earned. The landlord, on the other hand, may be living in Timbuctoo, and even have forgotten he owned the land in question, but the increased value goes on. One of the hardships of a doctor's lot is that all his increment is earned, and hardly earned, and the moment he is laid aside by illness or age his income stops absolutely.

#### Notification of Births.

THE persecution of medical men in connection with the notification of births seems about to begin in Paddington. Last week twelve parents were summoned before the magistrate, Mr. Denman, for not notifying the births of their children to the medical officer of health within thirty-six hours. The defendants, with one accord, said they had no idea there was such a law, and they were consequently let off with a fine of 3s. each. Now, if this shows anything, it shows great slackness on the part of the Borough Council in not letting parents know that this law has been adopted in their district, as it is ridiculous to suppose that twelve persons indiscriminately drawn from the district should not have known the fact if it had been properly brought to their notice. What, however, concerns us more is that the prosecuting solicitor said that, as the doctors were equally liable with the parents, it might induce them to notify if they were summoned and kept waiting about the court all the afternoon. The report adds: "Mr. Denman was understood to say that possibly that would be the best thing to do." We hope that Mr. Denman was misunderstood, for we cannot conceive a responsible magistrate backing up an attorney in a spiteful attempt to inconvenience doctors and to disorganise their practices because the Borough Council had failed in its duty of informing parents that a new law has been adopted.

#### Sanitation in West Africa.

THE Colonial Office has just issued a report by Professor W. J. Simpson, formerly of Calcutta, on the outbreak of plague which occurred in Accra and the surrounding villages in January, 1908. After bringing the outbreak under control, Professor Simpson made a tour of inspection throughout the Colony, visiting the principal towns and a large number of villages. The outbreak of plague lasted from January until July, and there were 344 cases, of which 300 terminated fatally. The points most worthy of notice were the readiness of the natives to accept preventive inoculation, and the success that attended its employment. It was performed upon 35,000 persons without a single recorded accident or ill effect, and only four of the inoculated persons subsequently suffered from plague, and of these one recovered. Professor Simpson's report on the general sanitary condition of the Colony is to the last degree unsatisfactory. The health of the Colony could be dealt with only by a fully-organised department, and this not existing, the damage to the health of Europeans must continue excessive. Not only are sanitary measures of the most primitive type virtually unknown in towns and villages, but no systematic and continuous preventive measures are undertaken to protect inhabitants from the conditions that generate malarial fever and agents which convey disease. The remedy lies in the organisation of a special health department responsible for correction of existing evils. This reform is considered in a second report of a Departmental Committee appointed to inquire into it, and the matter is now engaging the attention of the Colonial Office, and of the Earl of Crewe, the Secretary of State.

## LEADING ARTICLES.

### THE LONDON COUNTY COUNCIL AND THE HOSPITAL TREATMENT OF DEFECTIVE SCHOOL CHILDREN.

THE question of the treatment of defective school children is one of grave importance to private medical practitioners throughout the Kingdom. The Act that made the inspection of school children imperative was so obviously sound that it secured a practically unanimous verdict of approval. The application of the measure, however, has raised a host of difficulties, and the permanent solution of the problem upon a satisfactory basis appears to be a somewhat remote matter. In London the Education Committee of the County Council, after much consideration, adopted a method which merits the serious attention of every medical practitioner in the United Kingdom, inasmuch as the machinery of the metropolis is likely to become the pattern and example of all other urban education bodies. In fact, the London Committee has made arrangements with certain medical charities for the treatment of a certain number of defective school children, and this action raises questions that should be threshed out and faced to their final issue by the medical profession. A lead has been given by the Annual Representative Meeting of the British Medical Association, which has recorded its formal disapproval of the action of the Education Committee of the London County Council in entering into the arrangement mentioned. The motion was brought forward by Mr. H. Beckett Overy, seconded by Mr. Donald Armour. As the proposer said, only a small proportion of the children would be provided for under this plan, which failed in any attempt to grapple with the subject in its entirety. Sir Victor Horsley spoke of the action of the County Council as ridiculous, because it attempted to provide for a few hundred of the 70,000 or 80,000 school children in want of treatment. There is much to be read between the lines of the report of the discussion in order to realise anything like its full import. One of its most significant points appears to lie in the expression of the hope that the medical staffs of the hospitals will do all in their power to prevent the "abuse of voluntary charities and inadequate provision for a public evil." It remains to be seen whether the members of the honorary staffs of the London voluntary hospitals will act on this plainly-worded note of supplication and warning. Here is a large amount of public work—to use a homely phrase—going begging. Is it to go, as it should legitimately go, as a paid service to the medical profession, or is it to be added to the already disproportionately great sum-total of gratuitous toil borne by medical men? The answer to this question to a great extent depends upon the attitude of the honorary staffs of the voluntary medical charities of London. If they use their influence to dissuade their boards of management from listening to the wiles of the tempter, and, if necessary, take the further step of refusing to treat school children, then the County Council will soon find the doors of every hospital in the metropolis closed to the treatment of school children. It is, of course, a great temptation to hospital boards of management to add to their revenues by taking fees from the Council, and

receiving patients for treatment which *per se* will not cost them an additional farthing. At first blush, the temptation to the medical men on their honorary staffs is almost equally great. Here is the chance of helping the institution to which they are attached by seeing a few more gratuitous patients. A little further consideration, however, will show that to play into the hands of education and hospital boards is to inflict a grave injury upon a great class of private practitioners outside the hospital. It is clearly to the interest of the consultant class that their bonds of union and friendship with their extra-mural brethren should be close and harmonious. In the dispute the disunion of the medical profession is thrown into high relief. Through the want of strong and concerted action they lie at the mercy of public bodies and of hospital boards, while the kindness and humanity of one class of medical men is played upon at the expense of another. In any case, it is to be hoped that those hospitals that have gone over to the enemy will be put upon their defence. The members of the medical staffs of those institutions will receive a communication from the British Medical Association setting forth the views of that body as to the attendance of school children by medical charities. There are not only a few of the hospitals that have entered into arrangements with the Council, and the views of individual members of the staff and of the protests they have made, or the reasons by which they have been swayed, will doubtless in due course of time be obtained by the Association. Meanwhile, medical men generally will do well to keep themselves advised as to the views of the politico-medical committee of the British Medical Association.

#### THE ENDOWMENT OF CANCER RESEARCH.

ONE of the most munificent acts of generosity which it has been our pleasure to chronicle is that of the late Mr. Harry Barnato, who has bequeathed the sum of a quarter of a million sterling for the endowment of cancer research. The sum was left to perpetuate the memory of his brother and nephew, by the establishment of a charitable institution, and the testator's executors, realising the great problems at issue, have decided that this object could be most worthily accomplished by devoting the bequest to the building of a "Barnato Institute" for the reception of cancer patients, which shall also include the erection and elaborate equipment of cancer research laboratories. Thus, as it were, under one roof, the opportunity for investigating the intricate problems of cancer, both from the scientific as well as the clinical aspect, will be rendered possible. From the professional standpoint, indeed, nothing could be more excellent than this arrangement. The obviously weak point in the scheme of the Cancer Research Fund is the want of provision for dealing with the disease from its clinical side, that is to say, all those facts having an important clinical bearing which the Cancer Research Fund may happen to evolve in the future will always have to be submitted to the tribunal of the bedside before their value to human beings could be determined. To man it can matter not a jot how cancer runs its course in mice, unless he

can gather from these small rodents facts which will enable him to deal more successfully with the disease in himself. There has rather been a tendency of late to assign too much importance to the scientific aspect, as if that were the only problem involved in the case. Possibly this may be due to the fact that more public attention is directed to the matter than was the case in former years, through the medium of the published reports of the Cancer Research Fund. However that may be, it is impossible to deny that, after all, the chief aim and purpose of all cancer inquiry is to determine how that fateful scourge to humanity can be best brought within the control of modern treatment. Possibly, it may be that in the discovery of a cure for the disease, some method may be casually alighted upon with which scientific investigation has had nothing to do. There are instances of such in the past history of our art. For example, Jenner's great discovery of vaccination for small-pox was as much divorced from scientific research as a therapeutic advance of such magnitude could possibly have been. There were no research laboratories in his day, no microscopes, no bacteriology, nothing which could render him, scientifically, the least assistance in the problem which he ultimately solved. Thus, here was, at least, one instance in which science had no hand in the evolution of one of the greatest benefits conferred upon humanity. Nevertheless, on looking back on the ages past since Jenner's immortal discovery, it is obvious that unless something had been done to control the ravages of small-pox, the world might have become largely peopled with deformed, blind, and otherwise mutilated persons, as a consequence of which all human progress would have been arrested. Thus there is no beaten track by which Nature reveals her secrets; the path of science may appear to us the safest, and the most likely one to follow, although the most thorny, in the pursuit of knowledge, and we may learn much as we make progress by the way. But there is no certainty that the goal will be reached by this means. It may happen, therefore, with cancer, as it did with small-pox, that some by-path, with empiricism as its basis, may be discovered which will lead to the attainment of that object at which all cancer research work is aimed. Clearly, on these grounds, it is impossible to lose sight of the importance of studying the clinical aspect of this great question. We presume that in the Barnato Institute every facility will be provided, under the control of the staff of Middlesex Hospital, to submit to the test the reputed remedies in the treatment of cancer, which may be regarded as worthy of a trial. A system of control of this kind would undeniably be of much service, both to the profession and the public. There would then be no excuse for the "yellow press" claiming, in the largest newspaper type, that the "conquest of cancer" had been reached, or for publishing irresponsible statements upon the subject, by flamboyant contributors, before the Barnato Institute had been appealed to with a view to determining the validity or otherwise of the claim. We believe, therefore, that a great future lies before the Institute, as fulfilling a want in the great cancer problem which has hitherto, in the public interest, been severely felt. To have an Official Court of Appeal is a matter of such supreme importance to humanity as that of the clinical value of reputed remedies for cancer must obviously prove advantageous to mankind generally.



## CURRENT TOPICS.

### "Secret" Remedies.

THE British Medical Association has for some years been carrying on a systematic examination of so-called secret remedies. The constituents of these, being, as a rule, merely small quantities of common drugs, are easily recognisable by the usual processes of chemical analysis. The series of reports published periodically in the *Journal* has now been reproduced in pamphlet form. It constitutes, in fact, an indictment of the traffic in quack medicines which, if properly forced upon the attention of the legislature, ought to go a long way towards promoting amendment of the law sufficient to put an end to the worst forms of a pernicious system under which the poor and ignorant classes are the worst sufferers. The indictment is not less forcible because it consists almost entirely of boldly-stated facts, without any comment or attempt to emphasise them. The pretensions of the advertisements are first quoted, next the constituents of the remedy are described, and then its intrinsic value is given. The outlay of the quack nostrum-monger is nearly all in advertisements; the cost of his medicaments is never more than a small fraction of the selling price. Heal-all pills and potions rarely contain anything more costly than a small dose of aloes, whilst one large series of remedies for a multitude of different maladies are simple pillules of sugar. Cancer cures vary between coloured water and coloured grease, and the vendors do not hesitate to condemn the cruel surgeon and his knife, whilst urging sufferers to trust implicitly in their infallible cures. The profits in cosmetic quackery are enormous, fat cures, for instance, being rarely composed of any ingredients more costly than acidulated coloured water. With this pamphlet before them—and we hope it will be put before them in a way to compel attention—it will be interesting to see whether newspapers that set themselves up as censors of morals, and guardians of the public welfare, will continue to open their columns to lying advertisements, and put their endorsement on them by printing them in the form of editorial articles.

### The Heat and Poor Children.

MAGNIFICENT weather such as now prevails does not prove an unmixed blessing to the hundreds of thousands of children inhabiting the poorer quarters of London and our great cities. Not only are certain deadly infantile diseases always associated with prolonged summer heat, but the schools are closed, and the only holiday recreation grounds for multitudes of the older children are the slums, the courts and alleys in which their homes are placed. Some small percentage of the children obtain brief outings in the country, but the majority are condemned to stay at home. It is not surprising to find this question a subject of discussion in the papers, and that a plea is being made for a more systematic attempt to organise and direct the recreation of children on the lines already successfully tried at home, and worked on a much more extensive scale in the chief cities of the United States. The cost is very slight. The school buildings and their playgrounds, with other available open spaces, give enough room; it is only necessary to draw the children into them, and then teach them to play. The Shoreditch Borough Council has shown the way in this movement. They have placed their ground in Goldsmith Square under the superintendence of the Play Centres Committee and their trained kindergarten teachers. Poor children, unaided, cannot play because they do not know how to. Under proper superin-

tendence they soon learn, and the experience everywhere demonstrates the enormous improvement, physical and moral, which is brought about in the little ones who are taken away from the dirt and dangers of the streets, and unconsciously imbued with the spirit of order and discipline which wisely-directed play undoubtedly provides.

### Deaths under Anæsthetics.

DR. WALDO, who has for some time devoted much attention to the subject of deaths under anæsthetics, made a very remarkable statement at an inquest in Guy's Hospital on the 30th ult. He said that out of forty-one cases of deaths under anæsthetics in Guy's Hospital into which he had inquired, thirty-three were due to chloroform or mixtures containing chloroform. The remaining deaths were due to ethyl chloride. We do not know in what proportion of cases ether is used in Guy's Hospital, but we suppose it is sometimes employed, and it is therefore interesting to note that no death from its use has occurred in Guy's in Dr. Waldo's experience. Comparison of English statistics with Irish bear out in similar manner the belief in the comparative safety of ether. In Ireland ether is the routine anæsthetic, and very few deaths under anæsthetics occur. In some English hospitals chloroform is in common use, and deaths are far from infrequent. The question is becoming a very serious one as to whether in these climates—in certain climates there is no choice—an anæsthetist is justified in submitting a patient to the risk of anæsthesia by chloroform, except for very grave reasons. Many anæsthetists find they can manage nearly every case without resorting to chloroform; it is the duty of others to acquire a like skill.

### Bacteriology under the Hammer.

UNDER the recent Tuberculosis Act, County Councils in Ireland have obtained the power of appointing bacteriologists to aid medical practitioners in the diagnosis of tuberculosis. It is probable that, in the course of time, many of the public health authorities will make such appointments, and it is therefore advisable that the terms on which they are made should be well weighed by the medical profession. Two kinds of arrangement appear to be possible—appointment at a fixed salary, or appointment at remuneration according to the work done. It is open to the health authorities to proceed on either of these lines, and in the first instance, at any rate, it is probable the latter plan will be chosen, for, until experience shows the amount of work demanded, it would be difficult to decide on a suitable salary. Whatever plan, however, is adopted, we trust that few authorities will follow the example of the Dublin County Council. This body has adopted the course of putting the appointment up to auction. It has decided, in fact, to write to a number of "eminent bacteriologists," asking them to state the fees at which they would be willing to act. Though not explicitly stated, the suggestion is that the cheapest "eminent bacteriologist" should be employed. We trust that medical men employed in bacteriological and clinical research work will discourage this manner of filling appointments. We can think of no more undignified act than to tender for work in the way the Dublin County Council expect.

### Science in Public Schools.

As so often happens in similar instances, we are indebted to the *Times* for publication of an able summary of the report recently issued by the Board of Education on science teaching in public schools.

The Report is almost completely the work of Mr. O. H. Latter, Science Master at the Charterhouse, and is based upon the replies furnished by forty-six schools out of the seventy-one to which inquiries by circular were made. Most of the best-known schools supplied the information asked for; it is feared that the minority which remained silent had mostly cause for shame in their position in this matter. The movement towards inclusion of science in educational courses was started in 1854. Before that date the subject was virtually ignored everywhere. The movement received its greatest impulse through the action of the managers of the Royal Institution. They arranged a course of seven lectures on the subject. These were given by trusty leading men of the time, Faraday, Whewell, Tyndall, Latham, Daubeny, Hodgson, and Sir James Paget. The lecture by Faraday, at which the Prince Consort presided, created an enormous impression upon public opinion. In the boldest language he made it abundantly clear that the prevailing defects in the exercise of the mental powers among the so-called educated classes were mainly due to the absence of systematic training of the judgment, such as the study of science can alone adequately provide. Since the date of Faraday's lecture great progress has been made, and a fair proportion of cultivated men outside scientific professions—lawyers, politicians, and even theologians—have received of the heaven of science enough to modify sufficiently their intellectual activities. Unfortunately, and as usual, our inferiority to the Germans in this department of education is dwelt upon, and we are reminded that it is largely by the general national recognition of the value of science, and the importance of being guided by it, that she has attained her present position among nations.

#### Nurses and Drug-Taking.

At Birmingham Assizes, recently, a case raising an important question was tried before Mr. Justice Grantham. The action was brought by a nurse against the authorities of Queen's Hospital, Birmingham, for damages for wrongful dismissal. The circumstances which led to the dismissal seem to have been that the nurse, being unwell, took a dose of veronal—ten grains was the amount stated—which had previously been prescribed for her by a medical man, but which was not specifically ordered on this occasion by any of the medical staff. She overslept herself in consequence, and had no time for a proper meal before going on duty, but she thought herself fit for her work. The night sister on her rounds found her unwell, and there seems to have been something of "incident" between them; at any rate, it does not seem to have been disputed that the nurse was drowsy and heavy, and that there was a dying patient in the ward. The long and short of it was that she was sent to her room, where she was kept for two days, when, after a further interview with the matron, the secretary and the chairman of the committee, she was dismissed. There does not appear to have been any more in the case, and the question raised was whether it was a breach of discipline, as understood in hospital life, for a nurse to take a dose of an hypnotic without specific medical orders from one of the staff. From the hospital point of view it is important that this matter should be made plain, as a nurse possesses abundant opportunities for obtaining dangerous drugs, and there may be serious consequences to patients if she is not fit for her duties. On the other hand, under British law a person is allowed to dose himself as much as he likes with what

drugs he likes, and over-dosage with alcohol is the only one which constitutes a misdemeanour. The jury evidently found themselves on the horns of this dilemma, for they failed to agree after an hour's deliberation, and were ultimately discharged.

#### Professor Cleland's Farewell.

It was peculiarly fit that his University should entrust to Dr. Cleland the duty of giving the Address to the Graduates in Medicine and Surgery at the recent graduation ceremony in Glasgow. The words of one who, having performed his life-work, is going to well-earned rest, to those who are eagerly entering on the struggle of life, seldom fail to be impressive. When the words fall from the lips of one who, like Dr. Cleland, has served his day and generation strenuously, thoroughly, wisely, and the hearers are bound to him by the ties of affection and reverence that generous young men feel for a wise teacher, only the foolish are uninstructed. In terse, simple words, with no attempt at rhetoric—but on that account all the more eloquent—the teacher spoke of factors at work in life. Error has always its course in mundane affairs. Defect of knowledge produces error as to fact and action, but still more does weakness produce error which may lead to terrible results. In medical men, even more than in others, is weakness to be conquered, for it is dangerous to others as well as to oneself. One must get over the desire to please, and be firm, perhaps, in decisions which cannot but be displeasing. In considering the universe, we see not only wind and water, but organic life, the old "vital force," so much derided, but now coming to its own again. This formative principle, this *vis medicatrix naturæ*, is not merely a biological principle, but a moral one. "There is a *vis medicatrix* which will yet bring the long and laborious evolution of man's course on this planet to a glorious climax." Professor Cleland's farewell words are worthy of him.

#### PERSONAL.

CAPT. J. CRAWFORD KENNEDY, M.D., R.A.M.C., the newly appointed Assistant Professor of Pathology in the Royal Army Medical College, Millbank, is a well-known authority on "Malta Fever," on which subject he was awarded the Gold Medal for his thesis.

PROFESSOR OSLER will deliver the Inaugural Address of the Winter Session of the London School of Tropical Medicine on October 26th. The United States Ambassador will preside.

MR. W. M. MOLLISON, M.C., F.R.C.S., has been appointed Arthur Durham Travelling Student at Guy's Hospital. Mr. Mollison is Assistant Surgeon at the Evelina Hospital, and Demonstrator of Anatomy at Guy's Hospital.

THE Home Secretary has appointed Dr. Robert Trimble, of Preston, to be one of the medical referees under the Workmen's Compensation Act, 1906, to be attached more particularly to Preston, Garstang, and Chorley County Courts, in place of Dr. Edwin Moore, deceased.

A PARTY of French medical men, including twenty-two members of the French Medical Society, visited Dublin during the past week. They were entertained to dinner at the Royal College of Surgeons, and at the Viceregal Lodge by Her Excellency Lady Aberdeen. While in Dublin they visited many places of interest.

# A CLINICAL LECTURE ON ACUTE LEUKÆMIA.

By PROF. ALBERT HERTZ, M.D.,

University of Vienna.

[SPECIALLY REPORTED FOR THIS JOURNAL.]

IN this lecture Prof. Hertz said he was indebted to his chief, Prof. Kovács, for the following observations in acute diseases of the hæmato-poietic organs, and would illustrate his remarks by commencing with the following picture:—

A patient was admitted in a stupid, semi-conscious condition, and from whom little or no information could be obtained. After 14 days' residence he seemed perfectly well, but complained of a slight pain in the left little toe which soon extended up the leg, and in a few days after was quite helpless again. With the onset of the pain it may be mentioned that rigors were observed similar to those which he described he had before admission. Going back to that examination, we find recorded high fever, insensibility, great prostration, and cyanosis in face and extremities. On the left foot was a diffuse reddish-blue colouring extending up the leg, with dark congestion of the other toes. The axillary, inguinal and femoral lymphatics on both sides were greatly enlarged. There was no ulceration of the gums nor any changes observable in the throat. The respirations were deep and hurried, while the lungs had diffuse bronchitic *râles*, but were otherwise healthy. Apex beat of the heart could not be located, though the dulness of area was not increased, but a short systolic murmur with a dull sound could be detected, and no pulse could be found in the peripheral arteries. Meteoric gurgling was present in the abdomen, with a large inguinal hernia which had been replaced the night before admission, but was now impracticable. Liver and spleen were not examined. In the urine was serum albumin with a sediment of hyaline cylinders, leucocytes, renal epithelium and erythrocytes. In the blood hæmoglobin, according to Sakli, was 100 per cent., erythrocytes 5 millions 900, and the leucocytes were 16,800. The erythrocytes seemed to be normal, but the leucocytes had polymorphic nuclei giving neutrophiles 6.7 per cent., with a transition form of 3.9 per cent.; the neutrophile myelocytes were 8.07 per cent., while the large mononuclear ungranulated cells were 80 per cent., and small lymphocytes were only 1.4 per cent. There were no eosinophile cells nor mastoid present.

On looking over the preparations that had been preserved, you will find the cells which have been described as large mononuclear and ungranulated, have a round giant appearance, but bulging at different parts forming lobes which contain chromatin and basophilic protoplasm, and is ungranulated in most of the cells, although a fine neutrophile granular substance may be found in some of them. In many of them the protoplasm had large vacuoles with two nucleoli. It may be noted that many of these cells had transition forms like neutrophile myelocytes.

Shortly after this attack in the Institution, the patient died, and the diagnosis given as sepsis from acute leukæmia.

The post-mortem was conducted by Dr. Wiesner, who found general acute hyperplasia of the lymphatics, enlarged spleen, parenchymatous degeneration of the heart and liver, fatty degeneration of the heart and kidneys, purulent fibrinated pericarditis, purulent metastatic nephritis, with initial fibrinated peritonitis, probably pyæmic. Acute pulmonary oedema was present, with deforming endoarteritis of the aorta, right-sided inguinal hernia, oedema of the left leg and excoriation of the left little toe.

The anatomical changes most prominent were the lymphatic glands, which were large, soft and granular,

of a greyish to dark red colour; spleen and liver greatly enlarged, and the kidneys had a number of small abscesses. The marrow of the long bones of the leg had a yellow colour, but near the upper ends it became reddish.

The bacteriological examination of the fibrin of the pericardium showed purulent cells agreeing with those in the small abscesses of the kidney, and staphylococci with Gram's preparation with agar, a pure culture of staphylococcus pyogenes aureus.

The histological examination was still more interesting. A section of the femor medulla showed considerable change, although the erythrocytes were normal, there were very few leucocytes, particularly of the granular character. The mononuclear were more numerous, large, with a basophile, non-granular protoplasm, but here and there a few eosinophile myelocytes and few erythroblasts were present, but neutrophile myoblasts were entirely absent. When examined macroscopically, the reddish part of the medulla had a granular appearance. All the cellular product appeared to be similar to that found in the blood, particularly the large mononuclear cells with homogeneous protoplasm, as well as the small lymphocytes.

From a section of the ribs these large mononuclear and non-granular cells with stellate vacuoles were present in the protoplasm.

In the spleen the follicles were not enlarged, but the vessels were dilated, and in parts filled with erythrocytes mixed with mononuclear leucocytes.

In the "pulpa" a large number of mononuclear cells with a pale non-chromatic nucleolus were embedded in a basophile protoplasm; the small granular cells had a somewhat bulging irregular nucleus. There were very few polinuclear leucocytes, eosinophile myelocytes or erythroblasts.

The lymphatics agreed in every detail with the spleen, the lymph sinuses containing a large number of cellular matter in the same condition as the spleen.

The lymphadenoid tissue was greatly changed by the increase.

The liver and kidneys had no particular changes beyond the dilatation of the capillaries and the presence of the cell formation described in the other organs. These results point to an acute blood change, probably from the wounding of the little toe, which rapidly infected the blood with the staphylococci, producing change in the spleen, lymphatics, etc.; but that of the medulla of the bone is a separate change of a hyperplastic nature. The peculiarity lies in the poverty of the leucocyte formation, while the erythrocytic apparatus is normal. Of these leucocytes it must be observed the absence of the granular cells was the most prominent.

The small number of white cells in the blood, as myeloblasts and lymphocytes, was strikingly few in number, and might, therefore, be termed large-celled leukæmia, but the peculiarity is that the medullary portion of the bone is healthy, and none of these myeloblasts present, which point to their origin being of an extra medullary hyperplasia, probably arising in the lymphatics or spleen. When these organs are carefully examined we find the pulpa greatly increased, particularly the inter-follicular tissue, while the follicle itself is unaffected, although in some cases it may be found atrophic with all the appearances histologically of myeloid leukæmia. According to Schultz, Myer, etc., this pathological change was idiopathic

in chronic, as well as in acute leukæmia. In the pulpa of the spleen, as well as the lymphatic glands, these myeloblasts were present.

In looking over the literature on the subject, Butterfield records an acute case of myeloid leukæmia, in which he tells us the medulla of the bone was reactionless. He comes to the conclusion that the myeloid centre is an extra medullary organ, probably "metastatic" or due to "colonisation," which would be opposed to Ehrlich and Neumann's autochthonous origin in medulla. The case recorded along with Butterfield's, showing a myeloid increase in the lymphatics with the blood cells found there does not agree with the orthodox opinion that the disease is due particularly in these cases to any osteo-sclerosis or other bone disease. Lehdorff and Zak record another myeloid leukæmia in the aged, where they met with very few granular cells in the long bones, while the fibrous tissue was altered, but the spleen had every appearance of myeloid changes, as myeloblasts and giant cells were to be found in great abundance. They came to the conclusion that these were due to some changes unknown in the hæmato-poietic-lymphatic apparatus, and termed it lymphadenoid leukæmia.

In closely examining my own case for any aplasia in the osteo-medulla which may have arisen from staphylococci pyæmia as the centre of these myeloid cells, while they were found in great abundance in the lymphatics and spleen, I was led to a more critical examination of others of a similar character, of which the following is an example:—A domestic servant, æt. 44, came to hospital on December 13th, 1906, in a somnolent condition, with very little information of her previous history, beyond having had great pain in the head, lassitude, and fever for a few days before admission.

On examining the patient the sensorium was found to be very dull, associated with great prostration. The skin was icteric, and on the neck and extremities were small punctiform effusions. The lymphatics were swollen, the breathing dyspnoic, with 40 respirations in the minute, while both lungs had symptoms of pneumonia in both lower lobes. No apex beat of the heart could be detected, although its area was not enlarged, but the sounds were soft and clear; the pulse tension minimal and frequency 132. The abdomen had the liver greatly enlarged, the margin reaching the parasternal line somewhat below the level of the umbilicus, and the surface was smooth. The spleen was about three fingers breadth below the margin of the ribs, tender and of a soft consistence. The urine contained serum albumin and a large quantity of urobilin. Widal's reaction negative, and blood culture negative. The examination of the blood was more peculiar—hæmoglobin according to Sahli 20 per cent., erythrocytes 850,000. The leucocytes were examined from day to day, and never exceeded 1,000, their average being 880. The erythrocytes were irregular in size, poikilocytotic and slightly polychromic, few having nuclei and normoblasts. In the leucocyte preparations polymorphic nuclei and neutrophile were present in two preparations, but failed in others. The most prominent were small lymphocytes, but few mononuclear cells, no eosinophile, giant or myelocytes were present. Death was diagnosed as due to severe anæmia or leucopenia. Weichselbaum performed the autopsy, and found gangrenous periostitis around the left upper molar tooth, with necrosis of the alveola and a diphtheritic ulcer in the larynx. There was also confluent lobular pneumonia in the lower lobes of both lungs, and gangrene in the right upper lobe. Subacute enlargement of the spleen, with an anæmic infarct and degeneration of both liver and kidneys. There were also chronic endoarteritis of the aorta, petechiæ of the skin, and ecchymosis of the pericardium. The medulla of the bones in the upper limbs were red.

Here we have the origin of the sepsis in the periostium of a diseased tooth producing extreme anæmia and leucopenia, of which the other two were subsequently diagnosed. In 1904 Schwartz drew attention to an extreme case of leucopenia with the absence of the granulocytes. This was a child with a renal abscess, where bacterium coli and pus were present in the urine,

which Schwartz entirely eliminated from bone marrow interference, and believed it due to the lymphatics, although there was a possibility of a negative chemotaxis from the presence of the bacterium coli. The absence of a post-mortem fails to clear up this case. Another unusual observation is made by Türck, who has recorded a case of staphylococcus pyogenes aureus arising from the tonsils, septic endocarditis with a purulent embolus in the right lung. He found the blood with normal hæmoglobin and erythrocytes, but only 940 leucocytes; on the numeration plate only one polinuclearcyte could be found. The medulla of bone in the longer ones had a fatty appearance, while in the sternum it had a normal red colour. The microscopic examination showed the spleen and lymphatics to be normal, but the bone medulla had no granulocytes, but in their stead were found lymphocytes and plasma cells. This case nearly agrees in the leucocytes with the writer's own, the only difference being great anæmia with regenerative phenomena and a highly red appearance in the medulla of the long bones. He found giant cells in the blood, with chromatin and bulging of the nucleus and a non-granular protoplasm with eosinophile myelocytes, but no neutrophiles. In the spleen the principal change was in the pulpa, while there were no lymphocytes, but a large number of osseous non-granular giant cells with myeloblasts were found. In the lymphatics few lymphocytes were present, but a large number of myeloblasts were found with a few giant cells, while the liver had no giant cells, but a few radiating centres from acini proved the presence of non-granulated cells.

It is important to observe that the gums and teeth, which had produced a gangrenous periosteum was the probable result; but a large number of small round cells associated with large non-granulated ones, nowhere infiltration, is worthy of special notice, as there is strong objection made to the theory that gangrene can only be the result of infiltration from leukæmia.

Briefly stated, we have in this case hyperplasia in the marrow of long bones, increase of spleen, lymphatics, and liver as signs of leukæmia, but in the spleen and lymphatics there is an increase of myeloid tissue. Again, we have in the bone marrow large non-granular cells, while in the spleen and lymphatics the large granular cell of the marrow is found in its early stage.

A careful examination of the blood increases the difficulty of clearly demonstrating the lesion, but it is evident from the results that the erythrocyte and leucocyte apparatus are not injured in the same proportion, as the erythrocytes in the bone marrow are almost normal, while a large amount of blood pigment is to be met with in the spleen, pointing to destruction after manufacture, which is probably due to the septic toxin in the circulation. The presence of normoblasts in the blood, as well as in the bone marrow, supports this presumption of the bone marrow having its regenerative power entire. Our difficulty commences with the examination of the leucocyte, and how to reconcile the histological results of the bone marrow, spleen, and lymphatics. The granulated leucocyte is not to be found in the blood, which forces us to the conclusion that the functional apparatus of the granulocyte is also damaged by the same septic poison.

Türck relates two similar cases where the granulocytes were supplanted by myeloid cells, plasma cells, and lymphocytes, and no infiltration was present in any of the cells. In his second case, after treating with arsenic, leukopenia suddenly appeared in the form of chronic myeloid leukæmia, which finally assumed the form of acute lymphomitis with extreme leukopenia, whereby the granular cells fell to 6 per cent. According to Türck the bone marrow had lost the function of producing granulocyte, owing to a growth of lymphoid tissue, which is rather at variance with his histology of the cases. In our own cases the preparations will show that the myeloid tissue is abundant, but of a low type, from which a sort of giant myeloblast germinates, and may be correctly designated myeloid leukæmia, which is quite amenable to the Röntgen ray treatment, but as suddenly recurs as it disappears, the myeloblast reigning supreme. In this

sense it is possible that an intercurrent septic condition could be improved with the rays, but this presupposes the existence of a chronic leukæmia, which was not so in our cases, because in the qualitative analysis of the blood neutrophile polymorphic nuclei were exchanged for the myelocytes; besides, no symptom of the leukæmia existed before the sudden onset of the disease, nor could any sign be found in the subsequent examination. We are therefore forced to the conclusion that some deleterious infection suddenly acted upon and destroyed the granulocyte apparatus; subsequently, to accommodate the organism, a neoplastic tissue or hyperplasia of the bone marrow ensues which produces an immature cell and finally becomes established as a large or giant cell, that ceases to pass into the blood if the patient live long enough.

So far, this presumption is reasonable, but we must of necessity have varieties, and the first case quoted is a good example. There we had a staphylococcus infection that destroyed the function of the granulocyte in the bone marrow with the formation of the myeloid tissue, from which the myeloid cells had almost ceased to appear in the circulation, but to compensate for this deficiency a vicarious extra-medullary formation of the same tissue takes place in the spleen and lymphatic glands, from which the myeloid cells were thrown into the blood.

The question next arises: Is it the poison alone that damages the bone marrow, or is it a congenital or acquired weakness? Türck thought it due to a preceding illness in his cases, but that could not be advanced in our cases, as the inroad was sudden, and the specific granulocyte apparatus rapidly destroyed. Kelly is inclined to call the morbid condition a primary insufficiency of the bone marrow.

It must be admitted that the resisting power of the hæmatopoietic function differs in every individual, hence there must be some with a low power of resistance, which Ehrlich is pleased to call aplastic anæmia. The writer has recorded two of these aplastic cases this year, where the erythroblasts were absent, but myeloid tissue and atrophy of the lymphatics were present. The ætiology of one of these was from the tonsils, the second arose from the toxin of chronic dermatitis, which favours the view of congenital weakness in the hæmatopoietic system.

Morawitz found by experiments on dogs that he could produce morbid changes in bone marrow by repeated extractions of blood till the animal was exhausted, and the erythroblasts disappeared with the granulocyte while the lymph cells increased. By these experiments it was also proved that young animals had a greater power of regeneration than older. This is also noticeable in the human race, particularly after infectious diseases. This lower resistance may affect all the functions of the bone marrow, as in aplastic anæmia, or it may only affect a single cell group like the granulocyte apparatus, as in Türck's and our own cases. Histologically, anæmia and leukæmia are two different diseases, but the ætiology is the same, viz.: bacterial infection. The aplastic form of leukæmia is objected to by Pappenheim and Domarus, who maintain that Wolff's cases were only forms of medullary pseudo-leukæmia; while the cases we have presented here were really medullary aplastic leukæmia.

We may call it by any name that is most pleasing to the author, but enough has been proved to show that the origin is septic and acute in the hæmatic tissue. During the year we have had abundant testimony of such changes in the blood. Erb records streptococcus infection with large lymphatic cells and leukæmia. Eppenstein records acute lymphatic leukæmia from streptococcus sepsis. Ziegler and Jochmann, acute myeloid leukæmia from staphylococcus infection, etc., etc. All agree that a toxin is the cause of the leukæmia, and therefore is bacterial in origin.

This infectious origin is further illustrated in other infectious diseases where the myelocyte is found, such as pneumonia, scarlatina, erysipelas, meningitis, epidemica, typhus, malaria, etc., when myeloid changes are observed in the spleen and lymphatics. Myeloid metaplasia is another important change to be noted

in infectious diseases, where it seems the exhausted bone marrow demands some extra medullary assistance. After the infectious disease is past this extra function is unnecessary, and the extra medullary metaplasia disappears. Indeed, some authors now go so far as to support the idea of an infectious disease being the real cause of leukæmia, the latter being only the manifestation of the former. It cannot be affirmed, however, that the toxin is the ætiology, but it may have an injurious effect on the hæmatopoietic organ that may lead to leukæmia.

We may therefore conclude that it is uncertain what the agent or the cause is that produces the extra medullary metaplasia, or what reduces the active function in the bone marrow, with excessive growth of neoplasm which sends forth a quantity of pathological cells to enter the circulation. In leukæmia bacteria have been found which produce an alteration in the blood constituents in the shape of imperfectly formed cells ending in acute leukæmia. Some affirm the first change to be polynuclear leucocytosis which takes the place of the granulocyte, but in many cases this stage of polynuclear cells is lost and may be only transitory.

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NOTE.—A Clinical Lecture by a well-known teacher appears in each number of this journal. The lecture for next week will be by A. F. Tredgold, L.R.C.P. Lond., M.R.C.S. Eng., Medical Expert to the Royal Commission on the Feeble-Minded; Consulting Physician to the National Association for the Feeble-Minded, &c., &c. Subject: "Feeble-Minded Children."

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## ORIGINAL PAPERS.

### REGULATION OF MARRIAGE BY THE STATE. (a)

By S. A. BONTOR, M.D., M.S.,

Surgeon to the West Herts Hospital.

THE object of my paper this evening is to consider whether it is necessary, or advisable, for the legislature to introduce ordinances for the regulation of marriage, etc., in order to check the propagation and multiplication of the feeble-minded and degenerate.

The first question which arises in this connection is whether the matter is of sufficient importance to justify any legislation at all. We all recognise that there exists a certain proportion of those whom we group under the general term the "unfit," but are they not the inevitable product of the human wear and tear, the necessary detritus of the human machinery?

If we take humanity as it exists now it is undoubtedly on a much higher plane of moral and intellectual attainments than it ever has been before, and even from the physical standpoint there is, I believe, no decided evidence of any marked inferiority.

But it is not mankind in general—although to mankind the arguments I am about to bring forward would, *ceteris paribus*, apply with equal force—but our own nation in particular we must primarily consider. If we recall for a moment the history of the rise, progress, and fall of the various nations which have been pre-eminent in the past, we find that the same course has been experienced by each; there has been a period of hardship and energy accompanied by development, followed by a period of quiescence during the supremacy, and this has been succeeded by a decline and fall, a study of events during these periods showing us that it is by the interference by civilisation with the process of natural selection that the decline and fall is brought about. So soon as the necessity for striving and struggling is past there is no longer the extermination of the weaker members, and their proportion consequently steadily increases, until the standard of the whole country is lowered, and there is a diminution in the mental, moral and bodily

(a) Read before the West London Medico-Chirurgical Society, May 7th, 1909.

powers, and an increase in the numbers of those who are unable to fulfil properly the duties of citizenship, until finally there is a preponderance of these latter, and the doom of that country is sealed.

Now, how does this affect us? I say that we are travelling, and travelling fairly rapidly, in the direction of the fall. I do not wish to spoil a good case by over-zealous or special pleading, so in justifying this opinion I will confine myself to carefully ascertained and authoritative facts, and not indulge in generalities. I shall not employ vague terms such as "unemployable," "degenerate," "unfit," etc., nor will I deal with lunatics, the "dements," because the majority of these are under control and do not very largely add to the population.

The class which affects us most particularly is the class generally recognised as the mentally deficient, the "aments"; those who, in consequence of a state of mental defect at birth, or from early age, are unable to perform their duties as members of society in the position of life to which they are born. The majority of the members of this class is under no restraint and free to produce as many offspring as they please, and as a rule they are rather more prolific than the population in general, one observer—Dr. Potts—reporting that 16 mentally deficient women had actually produced 116 children, while another—Dr. Tredgold—reported that in Somersetshire of 167 feeble-minded women 61 had given birth to children and had produced between them no less than 158, these observations being confirmed by many others. Hitherto there have been no really reliable statistics as to the numbers of this class; their enumeration, for obvious reasons, is extremely difficult, and the figures which have until recently been relied upon are approximations only and are incomplete and unreliable. The extensive and recently issued Reports of the Royal Commission (1904) on the "Care and Control of the Feeble-minded," however, give us such elaborate and carefully compiled information that, so far as the "feeble-minded" are concerned, we may accept them as authoritative and trustworthy. From the statistics there given we are able to calculate that the total number of "aments" in England and Wales is 138,529, a number equal to 4.03 per thousand, or 1 to every 248 of the population.

As to whether this proportion is increasing or not we have not, for purposes of comparison, any equally reliable enumeration, but as Dr. Tredgold, who was one of the medical experts to the Royal Commission, has pointed out in his recently published "Mental Deficiency" (to which I am much indebted), the incidence of lunacy (dementia) and feeble-mindedness (amentia) very closely correspond, so that as the number of certified "dements" is accurately known, an estimation of the proportionate number of "aments" can be readily computed. Now, according to the Report of the Lunacy Commissioners, the number of lunatics on January 1, 1906, was 125,827, which is equal to 3.6 per 1,000, or 1 to every 273, but in 1859, less than fifty years ago, the proportion was 1 to every 536, so that the proportion of certified "dements" has practically doubled in fifty years, and it may therefore be accepted that the number of "aments" has, *pari passu*, increased in similar ratio. Further, it will be noticed that the proportion of the total number of persons suffering from all forms of mental deficiency is no less than 1 to 130—a state of affairs sufficiently appalling to justify, I think, my previous statement that this nation is approaching the fall, to call for the strongest efforts for its immediate amelioration, and to indicate the pressing necessity for the introduction of measures for the social control of those likely to increase this deficient population.

But, it may be said, such conclusions are based upon theoretical considerations. It is true that Mind is the predominant feature in Man, and that it is the faculty through which all human progress is regulated, but is there any practical justification for these theoretical considerations?

To meet this inquiry I have ascertained the capacity of our population for the public service in the Navy and Army, and I am informed (April, 1909) by the

First Lord of the Admiralty that no less than 40 per cent. of those who apply for service in the Navy are rejected by the recruiting petty officers for obvious defects before they are even submitted to the medical examiners; and from the last published medical report of the Army (1907) I find that, although the standard accepts men of 5ft. 3in., and a chest girth of 31½in., the proportion of rejections on medical grounds is as much as 30 per cent.

During the last few weeks the country has been thrown into a great state of excitement by the question of "Dreadnoughts," but of what value to the nation will the multiplication and improvement of our ships be, if nothing is done to check the degeneration of our men?

With these data before us, is not the conclusion forced upon us that no effort must be spared to find a remedy for so serious a complaint, and that we must find it as soon as possible? Before making suggestions in this direction, however, it will be well to consider what has been done by other nations in the matter. It is not necessary for our purpose to dwell upon the law of ancient times, such as those of the Spartans, nor to the proposals of Plato and Aristotle which were never acted upon, but to review only the enactments of recent days, the value of which we are able ourselves to estimate.

I cannot find that any laws or regulations directly bearing upon the subject have been introduced by any of the European countries, but in some of the States of the U.S.A. the serious position of affairs in respect of their own country has been appreciated, and several of them—Minnesota, Delaware, Michigan, Connecticut, New Jersey, North Dakota, etc.—have passed laws regulating marriage, while one (Indiana), in addition to a marriage law, has also adopted a sterilisation law "to prevent procreation of confirmed criminals, idiots, imbeciles, and rapists."

All of these laws have been passed within the last few years, Minnesota being the first in 1901.

I have here a copy of the marriage law of Indiana which was adopted March 6, 1905. It is "An Act regulating the issuance of licences to marry, prohibiting the issuance of such licences to certain persons, prescribing the duty of the clerk of the circuit court, and providing penalties for the violations of the provisions of this Act."

These provisions are couched in the appropriate legal phraseology, and I need not read them *in extenso*, but I will give a brief summary of them:—

"No licence to marry shall be issued except upon written and verified application. The form of application shall be supplied by the State Board of Health, and said Board may revise said form from time to time. No licence to marry shall be issued when either of the contracting parties is an imbecile, epileptic, of unsound mind or under guardianship as a person of unsound mind, nor to any male person who is, or has been, within the last five years an inmate of any county asylum or home for indigent persons, nor shall any licence issue when either of the contracting parties is afflicted with a transmissible disease.

"The marriage is illegal without a licence, and a penalty of \$100 fine lies against any county clerk for issuing a licence contrary to law, and the same penalty lies against any person authorised to marry who does so when the applicant has no licence."

I have here also copies of the marriage licences for male and female.

The sterilisation law of the same State, which was adopted in 1907, being of a novel character and of brief dimensions, I will read it:—

"Whereas heredity plays a most important part in the transmission of crime, idiocy, and imbecility, therefore be it enacted by the General Assembly of the State of Indiana that on and after the passage of this Act it shall be compulsory for each and every institution in the State, entrusted with the care of confirmed criminals, idiots, rapists, and imbeciles to appoint upon its staff, in addition to the regular institutional physician, two skilled surgeons of recognised ability, whose duty it shall be, in conjunction with the chief physician of the institution, to examine the



mental and physical conditions of such inmates as are recommended by the Institutional Physician and Board of Managers. If, in the judgment of this Committee of Experts and the Board of Managers, procreation is inadvisable, and there is no probability of improvement of the mental conditions of the inmate, it shall be lawful for the surgeons to perform such operation for the prevention of procreation as shall be decided safest and most effective. But this operation shall not be performed except in cases that have been pronounced unimprovable."

The law, you will notice, applies to male and female alike, and to idiots, criminals, imbeciles, and rapists. It does not apply to the insane; it is, indeed, unnecessary, for once a person has been placed in an insane asylum he very rarely comes into the open world again.

I have been at some pains to ascertain from men on the spot the efficiency of these laws in attaining their object, and I find there appears to be some doubt. Thus Dr. Hurty, the Secretary of the State Board of Health of Indiana, writes me: "The laws are being enforced, and are certainly producing good results. They have been in operation for only a short time, and therefore we have as yet no actual figures to present, but we do know they are preventing, in Indiana, the marriage of people who are unfit to marry."

Mr. Butler, the Secretary of the Indiana Board of State Charities, in reference to the marriage law, says: "Just how much good this has done I am unable to tell you. In some counties it is strictly enforced and in others it is not. At any rate, it has prevented some undesirable persons from getting married. Its administration now is largely a matter of education, and we believe will be quite beneficial."

Dr. Belfield, President of the American Urological Association, writes: "The prohibition of marriage among the unfit has been enacted, with varying details, by at least a dozen of our States. Such legislation has had virtually no value except to emphasise the necessity for more effective measures. In some of these States the laws appear to have been dead letters from their inception; in other States the laws have simply increased the sum total of official falsehood, and of bastardy among the irresponsible unfortunates. I think it may be accepted as proven that legislation intended to restrict marriage among the judicially unfit has not appreciably restricted propagation by these classes."

The operations usually performed for sterilisation are salpingectomy in the female and vasectomy in the male.

Vasectomy, which is performed by making a small incision in the scrotum, hooking up the vas deferens, and excising about half an inch of it without ligaturing it, is of course a simple little matter to carry out. It requires, according to Dr. Sharp, about three minutes to perform, and the subject returns to his work immediately, or at the most has one day off; he suffers practically no inconvenience, and he is in no way impaired for his pursuit of life, liberty, and happiness; but is effectually sterilised. One man, a phthisical patient, is reported to have had sexual intercourse within forty-eight hours of the operation and to have been perfectly contented and happy. After an experience of several hundred cases, which have afforded splendid opportunities for post-operative observations, Dr. Sharp says he has not seen an unfavourable symptom, and "there is no atrophy of the testicle (I may here remind you that this operation was originally introduced for the very purpose of producing atrophy of the testicles in cases of enlarged prostate), no cystic degeneration, there is no disturbed mental or nervous condition following, but, on the contrary, the patient becomes of a more sunny disposition, brighter in intellect, and advises his fellows to submit to the operation for their own good. And here is where this method of preventing procreation is so infinitely superior to all others proposed—that it is endorsed by the persons who have been subjected to it."

Salpingectomy, which I describe in the words of Dr.

van Meter, of San Francisco, is of course a more serious matter, as it involves an abdominal section, but except for this is quite simple. He says: "I make a small slit through the peritoneal covering of the tube, at its proximal end, and hook up the oviduct and sever it at its uterine juncture, reflecting the severed end on the distal side, out through the incision in the peritoneal covering, and closing the incision with two or three stitches of fine catgut."

There is thus in both cases no destruction, not even disturbance of the nerves and blood-vessels supplying the structures, hence positively and absolutely no interference in any way with the physiological functions normally performed.

Dr. van Meter has performed the operation of salpingectomy for preventing heredity on about one hundred women, and he says: "Now I fully believe that when the people are convinced that an operation can be done that will prevent the begetting of degenerate offspring they will be ready for such a law as the Sterilisation Law, and will compel choice between submission to such operation or remaining single. And such law would be more easily passed than a law which would entirely prohibit the marriage of persons whom a board of examiners might pronounce unfit."

Dr. Sharp, who has performed the operation of vasectomy in about 500 cases, says: "Restricting propagation seems to be universally agreed upon as necessary for the relief of the responsibility of imposing hereditary taints upon the offspring," while, as to the effect of the marriage laws, he expresses the following opinion: "Marriage is not always necessary to procreation, and the tendency of these different laws is to restrict propagation only among the more moral and intelligent class, while the most undesirable class goes on reproducing its kind, the only difference being that illegitimacy is added to degeneracy."

From a review of these opinions it is very obvious that the framing of suitable regulations is no easy matter, indeed, is so great a task that the only possible method for it to be successfully accomplished is by the carefully considered opinion of a competent committee, specially appointed for the purpose. Consequently, I have not come prepared with a cut and dried scheme to put before you; I should, however, like to offer a few observations and criticisms.

In the first place, there appears to be a unanimity of opinion that a step has been made in the right direction, but that marriage laws are not of very much use by themselves, and I quite agree with this. Marriage is an established custom of the greatest antiquity, and is one of the most important institutions of human society. It is so surrounded by sentiment, is so personal, and involves so deeply the right of the individual to select for himself his mate, that any new legislation must be so wisely framed and on so broad-minded a basis that the liberty of the subject may be jeopardised as little as possible, while the ordinances which are enacted must contain only such provisions as are likely to be accepted by the majority. But the majority, it would appear from the opinions of the American observers which I have given, are not yet prepared to accept these laws, and therefore our first endeavour must be to form a conscience of the community, to educate public opinion, and this, though difficult, should prove to be not an insuperable task.

There is no doubt that public opinion is a great force, capable of exerting enormous power, and there is equally no doubt, in my mind, that if the importance of this subject can be made generally recognised that many customs will be introduced and that many social influences will be brought to bear which will eventually render easy of accomplishment those measures which, at the present time, might possibly be met with all the resistance of the enormous power public opinion is capable of exerting.

The ground, however, is already somewhat prepared for us. When a marriage is contemplated, not only is the wedding clothing considered, the wedding feast prepared, and the guests bidden to it, but the hygienic conditions of the future home of the newly united pair

is taken seriously into consideration, the soil on which it stands, its aspect, water supply, its drainage, etc., are inquired into as a matter of course. Is it then not reasonable to expect that the far more important consideration, the very object for which the marriage has been consummated—the procreation of children—should receive at least the same serious consideration?

Further, such splendid results have accrued to the scientific efforts which have been made in the improvement in the breed of our cattle, our horses, our dogs, and even our vegetables, that it probably would require but little effort to induce the acceptance of public opinion of the necessity for the application of similar rules for the improvement of the human breed, and, therefore, the introduction of laws for the regulation of marriage would probably be favourably received by many even now; it would only be regarded as the addition of another of the hygienic ordinances, like those relating to sanitation, vaccination, etc., the value of which are now generally appreciated; indeed, several instances of inquiry into the matter by those contemplating marriage have already come to my notice. But even if marriage laws were introduced now, and willingly accepted and acted upon, would this be sufficient? I am afraid not. Most of the American observers seem to be of opinion that, unsupported by further measures, such laws would not be very far-reaching; some even suggest the aggravation of moral degeneracy "by the increase of official lying and bastardy." The former needs no consideration here, but as regards illegitimacy I doubt whether this opinion is correct for this country—the number of illegitimate children already produced, by the women of this degenerate class, is shown by the Reports of the Royal Commission to be at the present time so great that I believe marriage laws could be framed which would reduce, rather than increase, the number of bastards; but such laws would have to embody the provision of some physical means to be employed to prevent the propagation of these unfortunate members of our society. To say that they shall not marry is not sufficient; there are some persons of whom it may safely be predicted that they will beget deficient offspring; surely it would be better for these that they should have the companionship of a mate—only they must not be allowed to produce children to perpetuate their disabilities.

It is here, however, that the education of public opinion will be most difficult, but I believe it may be induced by convincing every intelligent man and woman of the danger of alliance with families vitiated by degeneracy; there is already a general acceptance of the opinion that lunacy, phthisis, etc., are an impediment to marriage, and therefore a general appreciation of the awful responsibility involved in the propagation of the less severe forms of mental deficiency should not be difficult to bring about; already I believe that many intelligent men would prefer to be sterilised, by such a method as I have described, than run the risk of imposing such hereditary taints upon their offspring; but while this is possible of the intelligent members of society the laws would have to be enacted for that portion to whom argument would be of little or no avail—in fact, for them it would have to be, "Be sterilised or you cannot marry," that is to say, compulsory sterilisation, and for this I feel that English sentiment may not yet be prepared.

But for us of the medical profession, with our increased appreciation of the physical side of life, our greater recognition of the importance of the laws of heredity, and how civilisation interferes with the beneficial influence which natural selection exercises upon the stability of our race, and our knowledge of the relation between marriage on the one hand, and health and disease on the other, the adoption of the principle of sterilisation should not be so difficult. Not only should we denounce to the utmost of our power the unrestricted marriage of the diseased, the degenerate, the criminal and the pauper, but we should also strongly protest against legislation or the want of legislation, which permits to those irresponsible people the production of as many offspring as they see fit to produce. To-day the individual dominates more than he has ever done before, and a population compara-

tively small numerically, but of highly developed individuality, would be of far greater value to the nation than a degenerate population even vastly superior in numbers.

I have shown that a rapid disintegration of our national strength is taking place. Now I would ask, Is nothing to be done to check it? Unless something is done it can only be a question of time for the doom of other great nations to overwhelm us.

The whole question is a difficult one without any doubt, but that is only an additional reason for facing it boldly, and that is why I have ventured to bring the subject before you this evening. I have tried to do so as temperately and logically as possible—but I do not forget that the World is not ruled by Logic. I do hope, however, that I have said enough to convince you of the urgent need for some action in the matter, and that every one will leave this room feeling the necessity, not only to recognise the evil, but to regard it as a solemn duty to preach the gospel of national supremacy; and, further, that when he sees a "degenerate" he will not regard him with an eye of pity as the inevitable product of civilisation, but rather look upon him as the text upon which his sermon may be based.

## THE ÆTIOLOGY, DIAGNOSIS AND PROPHYLAXIS OF ENTERIC FEVER IN INDIA. (a)

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BEFORE intelligent and successful measures can be adopted in connection with any infectious disease, it is necessary to know what is the agent which gives rise to the disease, where the store-house of the causal agent is to be found, and the means by which susceptible persons get infected; or in other words, what is the infection? where does it exist? how is it kept up? how is it conveyed? A few leading facts of this nature lie at the root of all scientific preventive measures which are applicable to infectious diseases, and more especially to enteric fever. In 1880, Eberth first recognised the bacillus typhosus as the causal agent of typhoid fever, and a few years later Gafky was able to obtain the germ in pure culture from the spleen, the liver, and the mesenteric glands of patients who had died of the disease. For over 20 years, matters remained practically at this stage, with the exception that a few more facts were added to our knowledge of the distribution of the bacillus in the tissues, secretions, and excretions of patients, until Koch in 1902-3 solved the problem of the store-house of the virus. In conjunction with French and other workers, he proved that a percentage of those who had passed through an attack of enteric fever continued to harbour the parasite for prolonged periods, excreting it either in their faeces, or urines, or in both. He found that not only was this the case in those who had passed through a typical attack of the disease, but that it might also occur after the slightest form of infection, or where the disease had passed unrecognised. He also proved that saprophytic existence of the bacillus outside the body of man is comparatively short. The conclusions he arrived at from these two important facts were, that man was the store-house of the bacillus in Nature, and that susceptible persons were infected either directly or indirectly from this source alone. The work initiated by Koch was confirmed by Lentz, Conradi, Kayser and others. To these workers we are indebted for most of our knowledge of the early facts about bacilli carriers. They proved that chronic carriers are sources of infection to the community, and that they may continue intermittently to disseminate infection for months or years. About the same time, several other important facts came to light, such as the demonstration of the bacilli in the blood early in the disease; improved methods of cultivating *B. typhosus* from the blood and dejecta:

(a) Read at the Bombay Medical Congress, 1909.

the isolation of the bacillus from the excretions of healthy persons with no history of enteric, but who had been in contact with enteric cases, or who had lived under conditions where infection was possible.

The knowledge of these new facts served as a sound basis upon which to build up scientific preventive measures, and so prevented waste of useless energy in other directions.

Man alone being susceptible to a virus which is short-lived outside the human body, the disease can only be kept up by being passed on from man to man. The channels by which this transference is accomplished are numerous, but broadly speaking they all resolve themselves into the fact that a susceptible person swallows the causal micro-organism in contaminated hands, flies, and other articles coming in contact with his mouth, food, or drink. A campaign against enteric fever can prove successful only when measures are directed against the sources of infection, *viz.*, the enteric fever patient and the bacilli carrier.

#### THE CAUSAL MICRO-ORGANISMS.

By enteric fever is generally meant an infection caused by the bacillus typhosus of Eberth, but within the past few years the term has come to have a wider meaning, and it is now used to comprehend an infection which may be caused by any one of a group of bacilli more or less allied to each other.

1. *B. typhosus* of Eberth, the causal agent of typhoid fever.

2. *B. paratyphosus* A. (Brien and Kaiser) and *B. paratyphoid* B. (Schettmuller), the causal agents of paratyphoid A. and paratyphoid B. respectively. In addition, a fever, clinically indistinguishable in its later stages from enteric fever may be caused by any one of a group of other bacilli connected with meat-poisoning, and more or less allied to the paratyphoid group. The known bacilli of this group are Gaertner's bacillus, and the enteritidis bacillus. (Flugge Kaensche) : the former of these is identical with the rat pathogenic micro-organism of Dunbar, Danyasz and Isatzcheuke, and the latter with the hog cholera group. A differentiation of the infecting agent can only be arrived at by bacteriological methods of diagnosis. Clinically it is not possible to differentiate between typhoid and paratyphoid infections. In all these infections the infecting agent is found in the blood at some period of the illness, possibly during the whole of the fever period. By far the greater majority of cases of enteric fever are caused by the *B. typhosus* of Eberth, and would therefore come under the heading enteric fever. The proportion of cases of paratyphoid varies according to different observers from 3 per cent. to 10 per cent. At the Central Research Institute, Kasauli, we met with 6 cases of paratyphoid in the investigation of 91 cases of enteric fever in which the causal micro-organism was isolated; of these cases, 4 were caused by *B. paratyphosus* A. and 2 by *B. paratyphosus* B. One of the paratyphoid A. cases was a mixed infection, as the *B. typhosus* of Eberth was also isolated from this case. With the exception of the wider distribution in nature of the paratyphoid micro-organisms, facts applicable to typhoid apply equally to paratyphoid infections.

#### THE RELATION OF THE CAUSAL MICRO-ORGANISM TO INFECTED PERSONS.

*During an attack of the Disease.*—At some period of the fever (probably during the whole of the fever period) the infective agent is found in the blood, and can be cultivated from it in suitable media. The specific virus when swallowed is taken up by the lymphatic tissues of the digestive tract where it commences to multiply; soon it finds its way to the mesenteric lymph glands, where further increase occurs, and from these situations it is passed on to the blood stream, when the disease becomes a bacteraemia. Inflammation of the tonsils and fauces being a common symptom shortly before, or during the early stages of enteric, it is very possible that the virus in some cases gains an entrance *via* the lymphatic tissues

of the tonsils. Through the medium of the blood the bacilli are lodged in the liver, spleen, kidneys, and bone marrow, and form foci of multiplication in these situations. The excretory passages of the bile and urine get their infections from the liver and kidneys respectively. Typhoid and paratyphoid bacilli grow well in bile and urine. From the gall-bladder the bacilli are excreted into the intestinal tract with the bile, and mix with the intestinal contents, where according to Lentz (a), they do not multiply, but are liable to perish.

In 42 samples of bile received at the Central Research Institute, Kasauli, from various parts of India and taken from *post-mortem* cases diagnosed enteric before death, *B. typhosus* was isolated from 27, which gives a percentage of 64.3. Many of the samples received were grossly contaminated with *B. coli* and other micro-organisms which may have killed off the *B. typhosus* in many of the samples during transit. We rarely find Eberth's bacillus in the faeces during the early stages of the disease. When several examinations are made after the 10th day, they have been found in 80 per cent. of cases, but with only one examination the percentage of positive results would not be over 30 per cent., possibly as low as 15 per cent. Early in the disease cultivations from the urine seldom give positive results, but after the 3rd week, the positive results would vary from 25 per cent. to 30 per cent. Wright and Semple (b) in 1895 drew attention to the urine as a potential source of infection in patients suffering from enteric fever. They isolated the bacillus from the urine and rose spots of a series of cases at Netley and Southampton, and utilised the fact of the presence of infection in the kidneys, urine, and rose spots as an argument in favour of the disease being a septicaemia.

The frequency with which the bacilli are found in the blood depends on the stage of the disease when cultivations are made, and on the medium employed. Examinations made during the first and second weeks give a higher percentage of positive results than those made later on. Stuhlern (c) examined 30 cases of enteric fever and made cultivations from the blood every 3 to 4 days during the fever period. He found the bacillus in every case, and in greatest number during the early stages of the fever. As the disease progressed the bacilli became fewer and fewer, and finally disappeared when the temperature reached normal. At the Central Research Institute, Kasauli, cultivations were made from the blood of 49 cases of enteric fever among Europeans, one cultivation from each case. The stages of the disease at which blood was taken varied from the 1st to the end of the 3rd week, but most of the examinations were made during the 2nd week. Typhoid bacilli were found in 32, which gives 65.3 per cent. Of the 17 negative cases, typhoid bacilli were subsequently isolated from the dejecta of 10, and remaining 7 gave a well-marked Widal reaction on *B. typhosus*. In another series of 15 cases of enteric fever among natives, in which the disease was diagnosed bacteriologically, cultivations were made from the blood of 10, one cultivation from each case. The stages of the disease at which blood was taken in those 10 cases varied from 1st to the 3rd week. Typhoid bacilli were found in 5, and *B. paratyphosus* A. in one, which gives 60 per cent.; of the 4 cases in which cultivations from the blood gave negative results, typhoid bacilli were subsequently isolated from the dejecta of 3, and the 4th gave a Widal reaction 1 in 400 on *B. typhosus*. In the remaining 5 cases in which no attempt was made to cultivate from the blood, typhoid bacilli were isolated from the dejecta of all five. The bacilli are sometimes found in the lungs, and may give rise to symptoms of bronchitis or other symptoms. On this account expectoration from an enteric patient may

(a) Lentz. Fourteenth International Congress for Hygiene and Demography, Berlin, September, 1907.

(b) Wright and Semple, on the presence of typhoid bacilli in the urine of patients suffering from typhoid fever. *Lancet*, July 27th, 1895.

(c) Stuhlern, *Central fur Bakt.*, July 31st, 1906.

convey infection. The bacilli are invariably present in the rose spots. The fact of the disease being a bacteræmia would lead one to expect to find the causal agent at times anywhere in the body. When the infection continues to multiply in the gall-bladder, or urinary passages after convalescence the patient becomes a "bacilli carrier."

*The relation during Convalescence.*—As soon as the acute clinical symptoms subside and the temperature approaches normal, the bacilli disappear from the blood, and convalescence sets in, unless it is interfered with by complications or a relapse. In the great majority of cases, shortly after convalescence has been established, the patient is free from infection. In a certain proportion of cases, however, the result is not quite so satisfactory, for it has now been proved that the infection may continue to cultivate itself in the biliary and the urinary passages during convalescence, and in a smaller proportion of cases it may continue to do so for weeks, months, or years after the convalescent stage has been passed. In these latter cases the patients are known as "bacilli carriers." It is evident from this and also from the fact that post-typhoidal abscesses occur, that recovery from enteric does not necessarily mean destruction of all the bacilli in the body. It is important to remember that during the later stages of the disease and during convalescence, the bacilli may be present in the urine in enormous numbers; as many as 100,000,000 per c.c. have been found in the urine of a case investigated at the Central Research Institute, Kasauli, and several times in this patient and in others the number varied from 1,000,000 to 90,000,000 per c.c. As urine is a suitable medium for *B. typhosus*, these enormous numbers are easily accounted for.

*Bacilli Carriers.*—Bacilli carriers are recruited from two classes of the community.

1. A percentage of persons who have passed through an attack of enteric fever, but who still continue to harbour infection excrete it in their faeces or urine.
2. A proportion of those who have been in close contact with the disease, or who have lived under conditions where infection was possible, but who have not passed through an attack of the disease in a clinically recognisable form.

The Germans make a distinction between acute (or temporary) and chronic carriers.

1. Acute or temporary carriers are those who harbour infection only for a few weeks, and, in the case of convalescence, enteric patients, for a period up to 6 weeks after convalescence has been established.
2. Chronic carriers are those who harbour infection for months, or years, and in the case of enteric convalescents, for periods longer than 6 weeks after convalescence has been established.

In both classes the gall-bladder or the urinary passages are the sources from which the infection is derived. The infection of the biliary and the urinary passages does not depend upon the severity of the disease. The mildest types of enteric fever are just as likely to give rise to bacilli carriers as the severest form of the disease. Absence of any symptoms pointing to their condition, and the intermittent excretion of infection, are the most noteworthy facts about carriers. It is only possible to detect these persons by means of a careful and skilled bacteriological examination of their faeces and urine, but owing to the intermittent excretion of infection this examination may have to be repeated daily for a prolonged period before any definite conclusion can be arrived at. In a number of cases in which the urine and faeces were examined daily at the Central Research Institute, Kasauli, the longest "bacilli free" interval in the faeces was 75 days, and in the urine, 31 days; In several cases the faeces were free from infection for periods varying from a few days up to 2-3 weeks. In others the urine or faeces were infected daily for a week or 10 days without an interval. The bacilli carriers are a potential source

of infection, and have in many instances caused outbreaks of enteric, has been proved beyond a shadow of doubt, and is now an accepted fact; but whether they are a fruitful source of infection or not, depends altogether on the facilities they have for infecting food, milk, or drink supplies, or coming into contact with susceptible persons.

As regards the percentage of enteric convalescents who become bacilli carriers, Klinger mentions 1.7 per cent., and Lentz 4 per cent., other observers think those figures too low. 86 convalescent enteric soldier patients were examined at the Central Research Institute, Kasauli (a), during 1906-7, and ten were found to be excreting infection for periods longer than 6 weeks after convalescence. This gives 11.6 per cent. of cases infectious for longer than 6 weeks after convalescence. Some of these continued to excrete the bacilli in their faeces or urine for months. Two of them were followed up for a year and found to be still infectious, and these two cases may go on for a number of years to come. In a campaign against enteric the detection of bacilli carriers is of the utmost importance, but unfortunately it is as yet a very difficult problem. What is wanted is a quick and accurate method of detecting these cases, and, when they are detected, safe and practical methods of rendering them permanently innocuous. The solution of those two problems will mark the next most important advance in the prevention of enteric fever.

#### BACTERIOLOGICAL METHODS EMPLOYED IN THE DIAGNOSIS OF ENTERIC FEVER.

The methods which have proved of most practical value are cultivations from the blood, and the serum test. Both are easy of application, and may be carried out by any medical man with a knowledge of bacteriological technique. In a few cases it may be necessary to fall back upon examinations of the faeces and urine, and in *post-mortem* cases it is sometimes necessary to prove or disprove a doubtful diagnosis by making a cultivation from the gall-bladder, the spleen, or other internal organs. In the detection of bacilli carriers, cultivations from the dejecta are absolutely necessary.

(a) *Blood Cultures.*—This method is of most value early in the disease, and a positive result may be obtained before Widal's reaction is present. The media employed are numerous and varied. The best results have been obtained by Conradi's (b) medium which is ox bile, plus 10 per cent. glycerine and 10 per cent. peptone. Kayser (c) used ox bile only. Epstein (d) claims to have obtained a higher percentage of positive results with any one of the following media:—

2 per cent. glucose agar; 2 per cent. glucose bouillon; 0.2 per cent. ammonium oxalate solution. The reaction of these media ought to be 0.9 per cent. acid to phenolphthalein. One or other of the media mentioned has gradually displaced plain bouillon which was formerly used.

The special advantages of the bile media are supposed to be their inhibitory action on the coagulation of the blood, and the consequent preventive action of its bactericidal powers, also the influence of the bile salts in retarding the growth of certain other bacteria. My experience has mainly been with Conradi's bile medium. Into a small flask, bottle, or large test tube containing 20 or 30 c.c. of the sterile bile medium, is inoculated a few c.c. of blood drawn off by means of a sterile syringe and under aseptic precautions, from a vein of the arm in front of the elbow, generally the medium basillæ. One c.c., or even a few drops, would probably be sufficient in many cases, but as a routine measure from 2 to 5 c.c. is recommended. Another method which is said to answer very well, is to prick the lobe of the ear, and allow a few drops of blood to fall into a test tube containing whatever medium is

(a) Scientific Memoirs by the Medical and Sanitary Officers of the Government of India, No. 42.

(b) Conradi. *Deutsch. Med. Wochen.*, 1906, No. 2, page 58.

(c) Kayser. *Deutsch. Med. Wochen.*, 1906, No. 2, page 823.

(d) Epstein. *American Journal of Medical Sciences*, August, 1906.

used. The medium containing the blood is then incubated at 37 deg. C. for 16 to 24 hours, and a subculture made on to agar, or Drigalski-Conradi plates, when a pure culture is obtained in the majority of cases yielding positive results. It is difficult to detect or stain the bacilli in a bile glycerine medium, hence the necessity for a subculture. The advantage of subculturing on to Drigalski-Conradi medium is that the colonies of typhoid or paratyphoid have a characteristic appearance on this medium, and can be easily detected for test purposes.

One of the most useful tests at this stage is the serum test. A colony from a Drigalski-Conradi plate, giving the delicate clear bluish transparent appearance of a typhoid or paratyphoid colony, can be easily picked out with a platinum needle, and mixed on a glass slide with a high titre specific serum in a suitable dilution, when an immediate clumping reaction takes place, which may be visible to the naked eye, or can be rendered visible by a hand lens, or under a microscope. At the same time one could test for motility, and stain a specimen. A motile bacillus, not retaining the stain when treated by Gram's method, giving a colony on Drigalski-Conradi medium, presenting the characters above described, and reacting to a specific serum, is sufficient for a quick diagnosis. Cultivations made by numerous observers on the lines above described give from 80 per cent. to over 90 per cent. of positive results during the 1st and 2nd weeks of the fever, and diminishing percentages during the later stages, until the bacilli finally disappear about the time convalescence sets in.

(b) *Widal's Reaction*.—This test requires no special description, as it is well known to most medical men. The reaction is rarely found during the 1st week, and may be absent during the second and third weeks, and in exceptional cases may not be found until convalescence sets in, or possibly not at all. In typhoid infections the serum may also agglutinate paratyphoid bacilli, and *vice versa* (group reactions); but as a rule the serum reacts in higher dilutions on the causal micro-organism. To this rule there are exceptions, and it is in these exceptional cases that a positive blood culture makes clear the nature of the infection. In some cases of jaundice the serum reacts on *B. typhosus*; and, of course, a reaction may be found for a variable period in those who have had an attack of enteric, or who have been inoculated against it. Notwithstanding these pitfalls, and others which might be mentioned, such an unreliable test culture, Widal's reaction properly interpreted is a most valuable aid in diagnosing enteric, especially in later stages of the disease. In blood cultures combined with Widal's reaction we have accurate means of diagnosing enteric in almost every case.

(c) *Cultivations from faeces and urine*.—Samples should be obtained as fresh as possible, and cultivations made without delay. A very good medium to use is the Drigalski-Conradi medium, but several other media have given good results, notably MacConkey's and Endo's. Conradi (a) has recently brought out a new medium for the detection of *B. typhosus* when present in small numbers. It consists of 3 per cent. agar to which is added picric acid and brilliant green crystal extra pure (Hochst). Both are acid dyes. The former is used in a dilution of 1 in 15,000, and the latter in a dilution of 1 in 150,000. The degree of acidity of the agar must be 3 per cent. Conradi states that a combination of these two dyes in the proportions mentioned, when added to agar, furnishes a medium which does not prevent the growth of *B. typhosus*, but at the same time has a strong inhibitory action on the growth of other organisms; after incubation for 24 hours at 37 deg. C. on this medium *B. typhosus* grows in small round colonies with smooth edges and almost flat. It is well to dilute the faeces before plating out. A convenient method of doing this is to emulsify one or two grammes of faecal matter in a conical glass vessel with 10 or 20 c.c. of sterile normal salt solution; when the emulsion has stood for about

one hour, so as to allow the coarser particles to subside, a small quantity of the supernatant fluid is pipetted off for plating. It is necessary to use 3 large Petri dish plates for each case, about 1 c.c. of the fluid emulsion is transferred to plate 1, and carefully spread over the surface with a glass rod spreader bent at right angles. The same spreader, but without being reinfected, is then carefully rubbed in succession over the surface of plates 2 and 3; all three plates are then incubated at a temperature of 37 deg. C. for 24 hours.

The next step is to search for colonies resembling typhoid or paratyphoid, and when any are found apply the usual tests.

The whole process is very easily carried out, but it requires considerable practice before one is able to detect the colonies with accuracy. It is very easy to miss a few typhoid or paratyphoid colonies mixed up with a rich growth of other bacteria found in faeces.

From urine it is only necessary to spread a small quantity of the urine varying from a few drops to 1 c.c. or thereabouts, over the surface of a Drigalski-Conradi plate, and incubate for 24 hours, and apply the usual tests to suspected colonies.

(d) *Cultivations from the gall-bladder or internal organs after death*.—Media similar to those employed in isolating the bacillus from the blood can be used. As regards the bile, it is only necessary to withdraw a little of this fluid from the gall-bladder, and spread it over a Drigalski-Conradi plate. A portion of the spleen, the liver, or the kidneys might be emulsified in normal salt solution and spread over a Drigalski-Conradi plate; or a small portion might first of all be transferred to Conradi's bile medium, and after incubating for 24 hours at 37 deg. C. subcultures could be made as already described in the case of isolating the bacillus from the blood.

(e) *Sources of infection*.—The recognition of the fact that man is the storehouse of infection lies at the root of the ætiology of enteric fever.

Those who harbour infection may be divided into four classes:—

1. Persons suffering from enteric fever diagnosed and treated as such.
2. Persons suffering from enteric fever but not diagnosed or treated as such. This class would include mild attacks in which the true nature of the disease was not suspected; and possibly many cases diagnosed and treated as ordinary diarrhoea or simple continued fever.
3. Convalescent enteric patients who have become "bacilli carriers."
4. Healthy persons who have never so far as we know passed through an attack of the disease, such as attendants on enteric fever cases, or persons who have been subjected to the same opportunities of infection as those who contracted the disease; probably temporary harbourers of infection, infective but not infected in the ordinary sense of the term.

Class 1 is the most dangerous, owing to the fact that the disease has been recognised. The remaining three classes may be looked upon as the real propagators of the disease in India, especially class 3.

(f) *Channels of Infection*.—In epidemics, a common source of food, water, or milk supply are the usual channels by which the infection is conveyed. In endemic cases, contact infection plays the most prominent part, and next in importance comes the contamination of food, milk, and drink supplies. Of these food and drink supplies, milk is perhaps the most important, and water for drinking purposes in India is of secondary importance. The opportunities for spreading infection are numerous in the cases of harbourers of the virus who have anything to do with the preparation or handling of food or dairy supplies. Cooks, bakers or dairy men who happen to be bacilli carriers were perhaps the most dangerous people of all, on account of the opportunities they have of handling media suitable for the dissemination of infection. In crowded camps, and where the disposal of infected excreta and other sanitary measures are difficult to carry out, flies may convey infection, but under ordinary conditions of life it is questionable whether

these agents account for even a small percentage of cases.

(g) *Preventive Measures*.—Any sound methods of prevention must take into account the sources from which the infection is derived, *viz.*, *enteric fever patients*, and *bacilli carriers*. Methods of prevention which fail to take these sources into consideration can end only in failure and disappointment. It is necessary to find out and isolate all those who harbour infection, and with this object in view particular attention should be paid to accurate method of diagnosis; to chronic carriers; and to those who live under conditions where infection may be expected. Before convalescent enteric patients are discharged from hospital or the sick-room, steps should be taken to ascertain whether they are free from infection, and any who are found to be infective should be detained until a definite conclusion has been arrived at as to whether they have become bacilli carriers.

Bacilli carriers should have their conditions explained to them, and they should be warned of the importance of cleanly habits. Disinfection of their excretions should be insisted on. On no account should they be employed in the preparation or handling of food, milk or drink supplies. In a word they should be debarred from any kind of work which gives them opportunities for infecting other people. At present we know of no safe and reliable method by which a bacilli carrier can be freed from infection. As regards hygienic measures, a scientific method of sewage disposal and a pure water-supply are the most important.

(h) *Prophylactic Inoculation*.—Prophylactic inoculation is strongly recommended for Europeans of the susceptible age period. It is especially applicable to young officers (Military and Civilian) and young soldiers on proceeding to India for their first tour of service, and it should be carried out shortly before or immediately on their arrival in the country.

## THE ORIGIN OF INFECTIOUS DISEASES. (a)

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DR. JONES is in error here, for no less an authority than Virchow has said that "syphilis was in Western Europe as early as 1472." The "Maderlienes" (leper burying grounds), eleventh, twelfth, and thirteenth centuries, of France were found by Dr. Raymond, of Paris, to be filled with syphilitic bones. The *chullpas* and *chaukallas* of Huarochiri province, Peru (ancient cavern burial-places) of the Yauyos Indians (pre-Aymaran), show, it is true, many syphilitic skulls, as shown by Tello, who has excavated a majority of their tombs, and exhumed 15,000 crania and mummies, 500 of which skulls were trepanned, and most of them, showing processes of repair—evidences of pre-Columbian syphilis. These evidences were exostoses of frontal, parietal, and occipital bones; gummos lesions of fronto-parietal regions; gummos osteomyelites, osteo-periostites (gummos and diffuse of parietals and occipitals); and extensive corrosive lesions and circumscribed gumma of the frontal bones.

Pruden has found lesions similar to those produced by syphilis in pre-Columbian bones from Kentucky. I myself described a skull, of the Bandelier collection, from Peru, showing operative interference for syphilitic lesion.

Moreno, of Buenos Aires, showed in the Anthropological Society of Paris prehistoric crania from Patagonia, which had syphilitic osteitis. Some of Tello's skulls were dug from a depth of 2 metres. The Aymaran and Incan used the same word for syphilis, *huanthi*, which is undoubtedly Aymaran. Therefore, the Incans probably received the infection from the Aymarans, who had possessed the soil before their conquest. The Yauyos Indians used this same word, an Aymaran one. Anciently the symbol for syphilis was a snake represented eating the penis, as a bug (beetle) on

the chin was the symbol for *uta* (corroding ulcer). There exists a written legend among the Incans where undoubtedly is described a disease like syphilis.

Syphilis had a beginning, as every disease has had. This autochthonous disease in America existed from remote times, according to all proofs—Montejo, Ruiz, Seler, Bloch, etc.—so remote that imagination cannot fix its beginning, and at a determined moment it found favourable soil to perpetuate and establish itself, as identical with the great epidemic in Europe of the fifteenth century. The factors developing this genesis were, doubtless, quality of virus, possibly from an animal originally (which I myself believe was the llama, by unnatural intercourse), alcoholism, traumatism, and lack of specific treatment.

The subject of evolution or involution of disease is very interesting. Allow me a few words thereon from my view-point.

It is a fact that when syphilis appears in a virgin soil it establishes itself violently, epidemic and malignant. It soon becomes milder, as in Japan today, by inherited resistance to the germ. Japan has known the disease 1,300 years, while Western Europe has known it only 500 years. Thus the mild germ from a syphilitic Japanese prostitute produces a most vicious type when inoculated in the European. Besides, there is a difference in contagion. Instead of being transmitted by the coition, it becomes oftener transmitted from mouth to mouth, or intermediately. Originally in America, syphilis is thought by prominent medical Americans, to have been more like sarna, a disease of the llamas; transmitted to man as sarna it has taken on a form similar to syphilis.

Tello thinks the epidemic of syphilis of remote time in Peru gradually assumed the form of the famous epidemics called Mal de Sainte Euphémie, Maladie de Chavanne-Leure, Maladie de Brunn, Maladie de Fiume ou de Scherhévo, La Facaldina, Le Sibbens d'Ecosse, La Radezyge, Mal de la baie de Saint Paul, etc.

According to Dr. Barthelemy, alcohol exasperates diseases of the skin. This law applies to all dermatoses. Syphilis (or sarna of llamas) is no exception to this rule.

The principal element of ancient Peruvian feasts was alcohol (corn wine). The cults of Venus and Bacchus went hand-in-hand. In Peru the pack-drivers all had coition with female llamas on their journeys over the mountains, lying down with them to be warmed by their wool. Thus original infection occurred. Later on, in ancient towns of the Andes Mountains the great Sun feasts produced a change in the disease in man. At these the men dressed in skins of llamas, would publicly copulate with a hundred virgins, set apart for the purpose, or without the skins would drink to excess and lead the dancing girls of nine years outside the house, where their will would be satisfied, and, returning to the house, would go on with the festivities. This was the common practice; not a few, but all, did this. The occurrence of diseases of a corroding nature like *uta*, maranas, espundia, mal de los Andes, all influenced the development of the animal disease sarna into syphilis, as we term it. Constant traumatism of the skulls in ancient Yauyos Indians made likely the occurrence of so many syphilitic lesions, found buried in the *chullpas* and *chaukallas* of old Peru.

Virchow has admitted that the greater part of osseous lesions in syphilis came from contusions. Cornil thought that the determining cause of the osseous lesion and of its site consisted in contusions, repeated in the same spot, or frequent traumatism.

It is supposed that ancient Peruvians used mercurial preparations for the cure of sarna of the llamas, and as well for eruptions of syphilis, as they call all the llamas of the Department of Puno "syphilitic llamas."

Salazar de Villazante (Relacion General de las Poblaciones Espanolas del Peru) speaks of the Indians going to Guayaquil for the cure of *bubas* (Spanish name of syphilis) to drink sarsaparilla and water, "which sweats them double that of water alone," and a hospital was built there for the cure of *bubas* among the Indians. Thus it would appear that the disease had somewhat changed from what it had originally been among Indians. Originally it had been cured by sur-

(a) A Reply to the communication of Dr. W. H. S. Jones on "The Virulence of Infectious Diseases."



gery in many cases. See some of the *huacos* potteries of old Peru, where there is undoubted evidence (from pre-Columbian graves, mind you) that syphilis and uta are represented as one and the same disease, and cured by surgical intervention.

As for the conclusion of Dr. Jones that the Spaniards could not have carried out their conquests if this Continent had been fever-stricken as it now is, how about *tabardillo*, which the Spaniards called tabardete (or typhus), "which always came at time of rains," which goes back to the Aymaran and Incan periods? And how about Oroya fever (first stage of verruga)?

Monardes affirms that the Indians employed "*pieдра bezaar*" in "*fiebras pestilenciales y do hay Tavardele*."

Brother Diego de Morales speaks of "the *llaga* of mosquitos" belonging to the coca and rice low-lands at the time of the floods. What was it? And what was the exanthematic epidemic of the reign of Huayna Capac? It was not small-pox, for that only came to Peru in 1533. See "*Ler enfermedad mortae de Huayna Capac*," *Boletin de la Sociedad Geografica de Lecina*, 1896. How about "*caracha*"? How about "*sarampion*"?

Gonzales Suarez ("*Hist. General de la Republica del Ecuador*") believes that "*paludisim*" killed "*Garcilazo*." So does the author of "*Noticias Cronologicas del Cuzco*." As to "*Huayna Capac*," the Inca and his disease, it is said:—"V en este ticapo sobrevino una enfermedad, y pestilencia muy grande en que murieron innumerable de gente de un sarampion que se habrian todos de una lepra incurable, de la cual murio este senor Huayna Capac."

Dr. Patron deduces from the chroniclers that "the disease was eruptive, and by its being contagious and an epidemic, and by the inefficiency of quinine, 'conoce segaramente desde tiempos muy antiguos' en lo que respecta a la enfermedad del Inca, descartar de esta discusion el paludismo (chucchu) de Garcilazo."

The negro of the Conqueror, Panfilo Narvaez, was the one who, in 1518, brought for the first time small-pox to New Spain. It broke out in Quito, Peru, in 1533.

Tifus exanthematico (*tabardillo*) has existed in ancient Peru "from remote times." Typhus did not come with the negroes first to Panama, as the author of "*Negros y Caballos*" says. For typhus pre-Columbino was already there.

Did the Incan die of syphilis imported from Naples or Spain, that "new epidemic" which down to the return of Columbus had presented in Europe "only a sporadic form," as recognised then, or was covered up by the definition, leprosy? Leprosy and syphilis in Europe, then, had been for several centuries hidden under the one name. What produced the change, so that the two diseases were afterwards separated? Fracaster, the great authority, has depicted the disease "syphilis" very different from what we recognise "syphilis" to be to-day.

Altogether the study opened up by these considerations on the origin and unity of diseases is intensely interesting, and reminds one of the objections raised by the Japanese in 1849 against the introduction of vaccination, that it would prevent the parents handing down to the next generation a measure of resistance to the contagion of small-pox. They cited the fact that for 1,300 years free sexual intercourse, while it had spread syphilis through the families, had also in its own time handed down a splendid measure of resistance to the destructive symptoms of the disease.

Syphilisation of the Japanese race has proved really a benefit. Moreover, while the Spaniards really carried out their conquests in the New World, it was not because this Continent was "not fever-stricken," but in spite of it being so stricken. And that "new disease," malaria, which killed Garcilazo, must have been brought here by the Spaniards, if it was not already here, as they surely did bring small-pox and leprosy, and their own kind of syphilis. Yet there were more than enough vicious fevers already here in the coca and rice fields of the Incan Empire to assure them of sufficient obstacles to their success had they not brought a plenty themselves.

Malaria is the same to-day among those Peruvian Indians and their anopheles mosquitoes as it was before

Pizarro. Call it by its earlier name, and there you have it.

## ALCOHOL AND ITS EFFECTS UPON THE CHILD. (a)

By DR. IMRE DOCZI,

Official Reporter to the Alcohol Commission in Budapest.

THE history of the anti-alcohol movement proves that lasting results in the fight against alcoholism can only be achieved when the rising generation is penetrated with a noble conviction thereon, and makes the question a part of its ideals. Youth belongs to the future, and he who knows how to win youth on the side of his ideals rules the future. The most fruitful of the efforts of the countries, therefore, against alcohol will be those who will impress on the youthful minds the evils of alcohol; on the great necessity of fighting against alcohol, as well as the immense advantages arising from the abstinence from strong drink, and in this manner to work up an enthusiasm for total abstinence.

With this object in view, the Minister of Education has had the following questions drawn up for use in various educational establishments:—

1. Is the pupil abstinent?
2. Does the pupil habitually drink intoxicating drinks, and in what quantities?
3. Does he only drink on exceptional occasions, and if so, when and in what quantities?
4. What influence does alcohol exercise on the conduct of the pupil, and his aptitude for doing his school tasks, and on his moral character?
5. Who first gave him alcohol? His parents, a doctor, or who?

Starting from these data, we seek next to impress upon the Hungarian pupil the evil effects of alcohol, and at the same time in doing this we want to be of assistance to the anti-alcohol movement, so that the various professors and teachers in this country must, whether willingly or unwillingly, force the question of alcoholism on the attention of parents and pupils, and let them see it as a deep-rooted social evil, which has already unfortunately commenced enslaving youth. There is no doubt that the Hungarian school children, whose numbers count more than half a million, have in this way attained knowledge of the evil effects of alcohol, and that through their children the parents have been obliged to learn that the question of alcoholism is followed with interest and attention by their children in the schools, so that the evil effects of alcohol shall not extend themselves to children. It must not be taken from this that teachers themselves do not avail themselves of opportunities to bring before the parents the evil effects of alcoholism.

The best and surest means of anti-alcohol propaganda is through schools, and as soon as the schools rally round the flag of anti-alcoholism the cause of total abstinence will gain a complete victory.

Most carefully prepared statistics, based upon the data obtained by the Hungarian Government as to the drinking habits of all the children under the age of eighteen, in all the schools of all classes, both elementary, private, and public, show that 20 per cent. are total abstainers. It is by no means rare to find schools where pupils are given alcohol daily by their parents. Among the poor Slav population this is given in the form of spirits, distilled from grain, or possibly more commonly from potatoes. In many instances the local cir-

(a) Abstract of Paper read before the International Congress on Alcoholism, London, July, 1909.

cumstances are described with great minuteness, and as the best means against the evil it is demanded that the drinking establishments be closed on Sundays.

A sad feature in connection with our propaganda is the fact that many are not clear as to what is meant by "abstinence." Nevertheless, our schools have rendered great service to the cause, and it is to be expected that these efforts will be crowned with good results.

As regards details it is to be noted that a part of the pupils only take alcohol under exceptional circumstances. Such exceptional circumstances are—Sundays and holidays, baptisms, weddings and funerals; amongst workmen and miners on pay days; in the grape-growing districts at vintage time; in agricultural districts at harvest time. On such occasions greater opportunities of indulging in alcohol are given to the people, and to the children also. These opportunities for indulging in intoxicating liquors have in some cases assumed such dimensions that, according to reports received, pupils in the first and second elementary classes come to the schools in quite an intoxicated condition. Reports have also been received of cases of pupils being too intoxicated to be able to do their lessons.

Equally sad is the reading of the report as to the evil effects of alcohol on the pupils; 36 per cent. of the pupils who indulge in alcoholic drinks were found to be careless and idle; 11 per cent. were found dull of comprehension; 13 per cent. were found quite incapable of any capacity for prolonged attention; in 10 per cent. of the cases it was found, especially in the first hours of the morning (8-9), that the pupils gave confused answers; 18 per cent. were very much behind in special subjects requiring extra mental effort, and 10 per cent. showed no evil effects.

The effects on children who indulge in alcohol are still more marked as regards its influence on the mind and character. 30 per cent. of the children were inattentive, nervous, and restless; 15 per cent. melancholy and abnormally shy; 30 per cent. coarse and without any feeling; 9 per cent. vindictive and given to stealing; 18 per cent. immoral; 6 per cent. particularly disinclined to learn; only 20 per cent. showed no signs of any evil effects. As regards the bodily health of the children who indulge in alcohol, three-fifths were found to be of colourless complexion and pale, with sunken cheeks; one-fifth showed arrested development of the body, in only one-fifth was the disturbing influence of alcohol unnoticed.

The statistics also show that in 97 cases out of 100 alcohol was given to the children by the parents, and only in the cases of the remaining three by the doctor. Children were given bread soaked in spirits, in other instances spirits were given to children to stop them from crying. In consequence of the extraordinary cheapness of brandy, in several communities it is given to the children regularly for breakfast. In consequence of the degenerating influence of the effects of alcohol the birthrate amongst such communities is becoming less and less every year. The prejudicial moral effects of the use of alcohol is also further enhanced, that on holidays the children are taken by the parents into the public houses. An hour spent in this atmosphere is enough to completely undermine the character of the child, and to eradicate any feelings of shame.

The result of the collection of these facts shows the sad certainty that alcoholism is unfortunately more widely distributed amongst children than is generally believed to be the case. This, however,

is only a reason that the fight against alcoholism should in every respect be fought with greater energy, and the first step towards this is to enlighten the people upon the total abstinence question and to win them over to the cause.

## OPERATING THEATRES.

### KING'S COLLEGE HOSPITAL.

REMOVAL OF STONES FROM ONE KIDNEY SOME TIME AFTER REMOVAL OF THE OTHER KIDNEY.—MR. PEYTON BEALE operated on a man, æt. 30, whose history was as follows: About 18 months previously Sir Watson Cheyne had removed his left kidney, which was completely disorganised and converted into a mere sac full of calculi. The patient made an uneventful recovery, but within six months began to complain of pains in the right loin, shooting down the right ureter. These continued off and on, and were sometimes associated with absence of urine, so that it was evident that he had periodical attacks of obstruction of the right ureter, and this obstruction was almost certainly due to calculi in view of his past history. Two days before admission he became unable to pass water, having previously passed some urine containing blood, and on admission he was found to be suffering from uræmia. He had a tumour about the size of a cocoanut in the region of his right kidney, and Mr. Beale assumed from his appearance and symptoms on admission, and knowing his past history, that he was suffering from hydronephrosis due to blocking of the upper end of the ureter by calculi, and that in all probability the kidney was almost entirely destroyed, there remaining only a minimum amount of secreting tissue compatible with life. He thought that an operation would give relief, and so he cut down on the right kidney in the lumbar region in the usual manner. On exploring the surface of the organ with the finger, it was found that at one part there was a mass of calculi immediately beneath the kidney capsule. Here the capsule was incised freely, but the calculi could not be removed until they had been broken up. Fortunately, this could be easily done with a pair of forceps, as the calculi were brittle and fairly soft. About 3 oz. of fragments were removed in this way, and on exploring the cavity from which they came by means of the finger, it was quite clear that there was but little cortical kidney substance remaining. The wound was thoroughly irrigated by hot salt solution, and lightly stuffed with wet gauze.

Mr. Beale said that cases like this were, of course, hopeless, but until the final stage it was really very difficult to decide when to operate. Their progress was generally slow, attacks of suppression of urine coming on at intervals, and being accompanied by severe pain, but after each attack the patient was apparently fairly if not quite well. He had on two occasions been called upon to operate upon cases in which one of the kidneys had been previously removed for extensive tuberculous disease and sepsis, but in these cases there was, as a rule, a marked difference, for the patient frequently appeared to be in very good health for five or six years after the removal of the one kidney, and, as a rule, these patients complained of little or nothing until suddenly one day they found themselves unable to pass any urine; they then died from uræmia in the course of a few hours. One of these cases Mr. Beale reported in THE MEDICAL PRESS ("Operating Theatres"), which was complicated by a small calculus impacted in the ureter, but the rapidity of the symptoms may be gathered from the fact that on one morning the patient walked some miles to her work, she was taken suddenly ill at 1 o'clock, and died of uræmia and collapse on the next day.

The present patient was still living seven days after operation, but died on the ninth day from uræmia.

PERINEAL ABSCESS.—The same surgeon operated on a man, æt. about 40, who was admitted with what appeared to be a simple ischio-rectal abscess on the right side. As regards his previous history, the only point of interest was that when he was a child he

had suffered from a perineal abscess which had been opened, it had healed rapidly, and had remained sound. There was a scar in the middle line of the perineum immediately in front of the anus showing where the operation had been performed. The ischio-rectal abscess was opened in the ordinary way, but it was immediately noted that the pus was not like that of an ordinary ischio-rectal abscess, for it was of a light grey colour. On exploring the cavity with the finger, it was found to extend upwards towards the middle line—i.e., into the perineum. On making a counter-opening here, a long probe was found to pass upwards and to the left in front of and some way above the body of the left pubic bone. There was no probe long enough to reach the end of the track, but it was pretty clear that it extended up the sheath of the left psoas muscle. Mr. Beale said that it was not advisable to explore further at that time, but he was pretty sure that there would be a sinus remaining, and later on he proposed to explore higher up and try to reach the origin of the trouble. He had seen pus from an empyæma find its way down the psoas as far as the groin, and he had seen an appendix abscess and a sub-phrenic abscess resulting from a gastric ulcer reach the perineum, but he did not remember ever meeting with a case in which pus passing down the sheath of the left psoas muscle had been found pointing in the right ischio-rectal fossa.

## CORRESPONDENCE.

### FROM OUR SPECIAL CORRESPONDENTS ABROAD.

#### FRANCE.

Paris, August 15th, 1909.

#### TREATMENT OF INSOMNIA.

INSOMNIA can result from very many causes. It is the duty of the practitioner not only to determine the special cause, but also to try simple treatment before prescribing hypnotics, which are sometimes dangerous.

This is particularly the case in acute infectious maladies where any hypnotic preparation paralyzes resistance.

In such cases, baths are more especially indicated. According to the condition of the patients, warm baths or the wet sheet may be utilised. A quiet sleep is thus obtained without injury to the patient.

In diphtheria, although the throat is apparently cured, if the child is agitated, with leaden facies and loss of appetite, grave intoxication may be suspected, and large doses of anti-diphtheritic serum should be injected.

The insomnia of phthisical patients may depend on different factors: cough, painful phenomena, gastric trouble, etc.; all these causes should be treated by appropriate means.

Intoxications enter for a large part into the causes of insomnia: tea or coffee are not supported by many persons, while alcohol provokes a heavy slumber, agitated by numerous nightmares; total suppression is frequently sufficient to bring back normal sleep.

Delirium tremens is often the consequence of alcoholic excesses; insomnia is complete while agitation is well marked and dangerous. Subcutaneous injections of strychnine (1-64 gr. two or three times a day), cold applications to the head, warm baths (95°) for two hours, morning and evening, and the milk diet suffice to bring back sleep. If, however, the insomnia resists this treatment, opium, chloral or bromide of potassium might be given until the desired effect.

Among chronic affections, uræmia is frequently accompanied by sleeplessness. Here milk diet should be prescribed and theobromin.

Where insomnia is produced by pain, analgesics might be given either alone or associated.

Exalgin, 2 gr.  
Phenacetin, 4 gr.  
Antipyrin, 8 gr.

For one wafer; two to be given at an hour's interval.

Pyramidon, 4 gr.  
Phenacetin, 4 gr.  
Hydrobr. of quinine, 2 gr.

For one wafer; two or three a day.

Trional, 10 gr.  
Phenacetin, 4 gr.

For one wafer to be taken at bedtime.

In diseases of the heart, intoxication of renal origin, dilatation of the heart, certain neurasthenic conditions, are the exciting cause. Hydric diet, milk regimen, and small doses of digitalis will generally act well; otherwise valerian, bromides, or small doses of morphia, with absolute rest will be prescribed.

In such patients, however, hypnotics should be used sparingly and with prudence, as cardiac paralysis may result from frequent doses.

In asthmatic attacks, morphia is indicated, and when relief has been obtained, the patient will be given iodide of potassium, alternating with belladonna and arsenic.

For persons suffering from neurasthenic or mental strain, worry, etc., the treatment of insomnia is somewhat delicate. In young men fatigued from intellectual strain at the period of examinations, hypnotics should not be used, they paralyse the cerebral activity. The practitioner should rather prescribe rest, quietness, warm baths and moderate exercise.

A hot bath three hours after the evening meal is frequently useful, or even, as advised by Dr. Huchard, an alternating hot and cold foot bath.

The feet are placed in hot water at 104° for three minutes, and then plunged for half-a-minute into water at a temperature of 68°; this is repeated three times in succession.

The hands might also be plunged into hot water (104°) for half-an-hour.

In persons suffering from moral depression due to money losses, private chagrin, moral fears, hypnotics must be given:

Valerianate of ammonia,  $\frac{1}{2}$  dr.  
Tincture of valerian, 2 dr.  
Peppermint water, 3 oz.

A teaspoonful at bedtime in a little water.

Bromides should not be given indefinitely, while sulphonal, trional, veronal, should be used with precaution, as in large doses they depress the nervous system.

*Simple insomnia*:—A warm bath (95°) before dinner for half-an-hour. Light meals without wine, beer, or coffee. A tablespoonful at bedtime of:

Hydrate of chloral, 2 dr.  
Bromide of potassium, 1 dr.  
Cherry laurel water, 2 dr.  
Syrup of poppy, 2 dr.  
Water, 4 oz.

*Cardiac insomnia*:—A wafer of caffein (5 gr.) at eight in the morning and at four in the afternoon. At bedtime a wafer of:

Pyramidon, 4 gr.  
Valerianate of quinine, 5 gr.  
Bromide of potassium, 8 gr.

*Insomnia of neuropathic patients*:—A warm bath before dinner. At bedtime a large piece of warm cotton wool on the chest and stomach. If hypnotics must be given:

Veronal, 6 gr.  
or  
Hypnal, 15 gr.

*Insomnia of convalescence*:—  
Hydrate of chloral, 2 dr.  
Syrup of poppy, 2 dr.  
Syrup of orange, 1 oz.  
Water, 3 oz.

A tablespoonful at night.

*Insomnia of children*:—Seek the cause (over-feeding, constipation). If it is due only to nervous conditions, bromide of potassium (15 gr.) or:  
Urethane, 10 gr.  
Syrup of orange, 1 oz.  
Water, 1 oz.

Baths at evening and lotions in the morning are very useful.

## GERMANY.

Berlin, August 15th, 1909.

## A NEW REMEDY FOR CATARRHAL AND TUBERCULOUS DISEASES OF THE LUNGS.

WITH the remedies in use so far, for affections of the air passages generally, one is only too forcibly impressed with the scanty results obtained from their employment. This and that new remedy has been vaunted and so highly praised that the physician, however sceptical he may be and distrustful of everything, new or old, is tempted to give it a trial, but with only the faintest hopes of any tangible good effect. With all of them, so far, on giving them a trial it may be truly said that his expectations suffer less disappointment than his hopes, for where you anticipate but little your disappointment will be correspondent. Things being as they are with all known remedies, it need excite little wonder when still fresh and new remedies are brought before our notice. Amongst the latest of these is a tar product, to which the elegant and suggestive name of "Sputan" has been given. Let us hope that in effect it will prove "better than likely," to use a pithy expression of some rural districts.

Sanitätsrat Herr Dr. Dorn (*Deutsche Med. Zeitung*, '09, No. 61), who is Arzt für innere Krankheiten, has had this new remedy in his hands for the last four years, and during this period has submitted it to numerous tests. Sputan, he says, is a slightly alcoholic, aqueous, aromatic, product of tar, which contains in addition to the tar 0.05 per cent. of salicylic acid. He commenced the use of the sputan, he tells us, with all the scepticism the treatment of phthisis is likely to be the parent of, but still hoping that it might do some trifling service in alleviating the condition, and with still slighter hopes that it might—that it might—somewhat retard the devastating progress of the disease, anything further than this, let alone complete cure of the disease, being beyond his power. Stimulated, however, by some striking improvements that some others had obtained by the use of sputan, he gave a renewed attention to the preparation, and placed the cases treated under strict control.

He gives his experiences in 50 cases in which sputan was systematically used, dividing them into three groups, according to the nature, development, and severity of the disease.

The first group comprised the cases of catarrh, in which, however, no morbid change was demonstrable in the lungs. The second took in the suspected cases in which there was a hereditary tendency, the third those who were actually tuberculous, i.e., in which tubercle bacilli were found in the sputum.

With the idea of prophylaxis in mind, he gave the medicine in tablespoonful doses to all cases night and morning. This dose was raised systematically, week by week, so that by the end of four weeks four table-spoonsful were taken at once. This maximum dose was continued until some visible improvement set in, when the quantity was gradually reduced.

In the catarrhal cases, frequently following influenza, the duration of treatment was from three to ten weeks. These cases were of interest, as demonstrating that the new remedy was an enrichment of our anti-catarrhal armamentarium. In the second class of cases the treatment was more intensive, more prolonged, lasting from two to six months. Here out of ten cases nine recovered so far that they were able to take up their work again. The remaining patient was admitted into a sanatorium, and was not heard from further. The observations on the third class of cases, that in which tubercle bacilli were proved to be present in the sputum, in which, therefore, there could be no doubt as to the correctness of the diagnosis, were given more in detail. The cases were twelve in number, a number of whom the writer says were temporarily cured, and were able to resume their occupations. Case XI. was of special interest. It was that of Hilda Z., who was under treatment for three months and a half. The improvement was remarkable; on the last occasion on which the sputum was examined there were scarcely any traces of tubercle bacilli to be found. The in-

crease in weight was a lasting one. From the latest information concerning her, a happy termination to her illness might be justifiably anticipated.

In his opinion, sputan is scarcely ever contra-indicated. Even in the larger doses, it was well borne, with a few exceptions. Frequently an increase of appetite was noticed whilst it was being used. Night sweats were relieved, and increase of weight took place. The improvement of the general condition in a short time was quite noticeable. Here it must be observed, however, that most of the cases treated were of the poorer classes, so that the improved diet they received, and generally improved surroundings were, perhaps, accountable for some of the general improvement. The writer does not claim that his observations justify a definite conclusion, but they lend encouragement to further trials of the drug. He would enter a protest against the practice of limiting the treatment of tuberculous cases in sanatoria to hygienic and dietetic means, and would combine this with the best medicinal treatment available.

## AUSTRIA.

Vienna, August 15th, 1909.

## TRICHOCEPHALUS DISPAR.

At the Gesellschaft für Innere Medizin, Gaustalla presented a male patient, æt. 40, who suffered from "flagellate enteritis" from the trichocephalus dispar. Trichocephalus abounds in the caput cæcum, and was first noticed by Morgagni about 1760 or 1761. The story goes that a student of Göttingen was dissecting a girl, æt. 5, when he accidentally opened the caput cæcum and a few of these worms crawled out. Wrisberg and other students considered them new entozoa, while the demonstrator of anatomy at the time assured them that they were ascaris, or another form of oxyuris. A dispute arose, and the parasite got a new name for the time being as trichinalis or hair tail. About this time an epidemic raged in the French army stationed at Göttingen, and the disease was described as morbus mucosus, and this entozoon was frequently found in the bodies of the soldiers that died.

Later investigation, however, proved that this new name, trichinalis, or hair tail, was not appropriate, as the long hair formation was the head, and not the tail; hence trichocephalus dispar had to be adopted, the Germans calling it "peitch wurm," or whip worm.

Now, from this whip worm we get the disease flagellate enteritis. The worm does not seem to be common in England, although Cobbold accused the pathologist in his time for negligence in not discovering it, but the vigilance of the pathologist since that time has not yet added to our knowledge of the disease. Gaustalla tells us his patient had suffered for the last 40 years from sudden attacks of diarrhoea, with fever and severe pain in the abdomen. On admission for this diarrhoea he had well-marked petechiæ on the extremities, dyspnoea, enlargement of the spleen and liver, with pain over abdomen and many of the bones on the slightest pressure. The number of red blood corpuscles were 2,800,000; hæmoglobin, according to Fleische, 20; increased mononuclear leucocytes, and 9 per cent. of eosinophile cells. The hydrochloric acid in the stomach was greatly reduced, the stools fluid and containing the entozoon trichocephalus and alkaline in reaction. A large number of flagellatæ resembling circa monads, with the peculiar ova of the trichocephalus dispar, proved the cause of the disorder.

## ACUTE ENCEPHALITIS.

Strumpell presented a female with an obscure form of encephalitis. She had a somewhat unsteady gait and a very sensitive patellar reflex, as well as active abdominal reflex, well-marked nystagmus, but no disturbance in the sensory nerves.

About two months ago, according to her history, she suddenly took headache, with vomiting, vertigo, ataxia, nystagmus, and bulbar disturbance in speech, with abducent paresis in both eyes. From these symptoms Strumpell thought the encephalitis was confined to the region of the pons, whatever the origin might be.

He also presented a severe case of multiple sclerosis and a man with hysteria. The latter had a peculiar saltatory reflex cramp, which had set in suddenly after a fall. His left side was anæsthetic, and he had imperfect smell and taste.

Schlesinger said he had also seen the patient some time ago, and had seen the cramp disappear quite suddenly. The spasm was more like a sailor's dance, and, as the patient belonged to that profession, he thought more like an uncontrollable imitation of the Matroser dance.

#### CURE FOR MORPHIA MANIA.

Schlesinger read a few notes on his experiment with "skopolamin-dionin" in cases of confirmed morphia mania. His mode of treatment was to prepare a mixture of morphia, 0.2 gramme; skopolamin, 0.00025 gramme; dionin, 0.3 gramme; and water, 10 grammes. This was injected twice to four times a day at the beginning. The next day the injections were the same, but the amount of morphia was diminished. The morphia is gradually reduced every succeeding day till the eighth or fourteenth, when it is withdrawn altogether. After this the reduction of the skopolamin-dionin commences till the whole is withdrawn. The danger connected with this treatment is almost *nil*, and is usually effective in curing the habit. An important feature in treatment is the freshness of the preparation, as anything three days' old should not be used.

Noorden agreed with Schlesinger in the treatment, but was doubtful about the permanency of the cure, as he found patients were easily led back into the old habit.

#### HÆMOLYSIS OF IRON AND ARSENIC.

Strasser and Neumann supplemented their former experiment with iron and arsenic in different diseases. The hæmolysis is conducted in what they call a hypotonic solution of salt, whose concentration is measured, and the time for the solution is fixed at 15 minutes. The following concentrations or isotonic index in the different diseases were required:—Normal blood required 0.39 per cent.; polycythæmia rubra, 0.38 per cent.; icterus, 0.33 per cent.; leukæmia, 0.44 per cent.; chlorosis, 0.29 per cent.; secondary anæmia, 0.34 per cent. to 0.38 per cent.; anæmia, 0.39 per cent.; tuberculosis with anæmia, 0.39 per cent. In chlorosis, when iron was given, the isotonic index was 0.28 per cent., while the hæmoglobin was 28 per cent. On the other hand, it was 0.39 per cent. when the hæmoglobin was 70 per cent. In arterio-sclerosis, with injections of natrium kakodylicum, the index was 0.41 per cent., but after several months' treatment it fell to 0.31 per cent. In myelogenic leukæmia it fell from 0.44 to 0.38 per cent. These isotonic indices constantly sink when the hæmoglobin index rises.

#### HUNGARY.

Budapest, August 15th, 1909.

#### THE MOLECULAR AND CHEMICAL RELATIONSHIP OF TRANSUDATES AND EXUDATES.

At the recent meeting of the Kolozsvár Medical Society, Dr. Purjesz read a paper on the above subject. He conducted extensive researches in this field, with the following results: The molecular concentration phenomena of transudates and exudates are substantially the same. The osmotic concentration and the concentration of electrolytes in both exudates and transudates are approximately the same as those of normal blood serum. Just as in the latter, so in the former, the concentration of the electrolytes presents slighter variations than the total concentration. It seems that the human serosa in both exudative and transudative processes always allow the inorganic salts to pass through in the same concentration, while the organic substances, according to the nature of the disease, are more or less held back. The content in ash is no reliable index of the content in electrolytes. From the standpoint of the No-ions, transudates and exudates are neutral, like blood serum, although, like the latter, they both contain tritratable alkali. The lecturer has not been able to discover any relation between the content in albumin and dry substance, on the one hand, and specific gravity on the other. There

are no particular differences between the two groups of fluids as regards total proteids, serum-albumin, serum globulins, ash and chlorides.

#### THE ACTION OF IODIDES IN ARTERIO-SCLEROSIS.

Dr. Veress said that, although the use of this drug in the treatment of this condition is very extensive, yet but little is known of its mode of action. He presented the results of a series of observations in young men, otherwise healthy, to whom potassium iodide was administered in daily doses of from 0.3 to 0.5 gr., for periods of ten to fourteen days. It has been claimed that this drug has no vaso-dilating action. Examination of the blood from the experimental subjects showed that there was a marked loss of viscosity, sometimes as much as 10 per cent. This apparently explains most of the therapeutic effects of the drug, as its action in increasing the fluid character of the blood is equivalent to dilatation of the vessels, for the reason that the stream flows more rapidly. This also shows that the drug must be continued for long periods in order to produce any effects. The serum does not become fluid to the same degree as the blood *en masse*, and sometimes is even increased in density, so that the change appears to be governed by the behaviour of the cellular elements of the blood alone.

#### RARER FORMS OF RHEUMATISM.

Dr. Kanitz made some interesting comments on this subject. He believes that a sharp line must be drawn between muscular and joint rheumatism. To secure uniformity and to avoid confusion, the term muscular rheumatism ought to be dropped, and the word rheumatism applied to that inflammatory condition of the various locomotive organs and their appendages which results from sudden changes of temperature. Persons inclined to rheumatism need not therefore fear intense, uniform cold, but rather overheating, specially that brought about by muscular exertion, followed by sudden rest and cooling. The quickest and most reliable remedy in cases of fresh or acute rheumatism is exercise. The patient may safely indulge in all those movements which cause pain, but care should be taken to exclude joint rheumatism. Chronic rheumatism can only be cured by mechanotherapy, in which active and passive movements play an important part. Among the rarer sites for rheumatism which are little mentioned in the literature are the following. A rheumatic process in the periosteum of the ribs, the sternum, and the long bones, rheumatism of the diaphragm, isolated rheumatism of the coccyx and the pelvic outlet, and localised rheumatism of the muscles of mastication. Instances of these are described where good results were secured in all but that of the diaphragm by forcible massage. For rheumatism of the diaphragm the Faradic current gave some relief.

## LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

#### THE DECLINING BIRTH-RATE.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—Like your correspondent, "A Student of Sociology," I have from time to time trespassed on your valuable space with regard to this momentous problem, but have no intention on the present occasion of repeating myself in replying to his letter in your last issue.

It is scarcely necessary to remind him that there exists no striking analogy between a country like France with a declining birth-rate and *diminishing* population, and England with a declining birth-rate and an *increasing* population—I believe an increase of about 500,000 yearly. What to do with this surplus we are at our own wits' end to know. At any rate, I cannot recall any prominent politician, of whatever shade of political thought, who has had the boldness to ask for more.

Your correspondent, knowing as he must these facts, reduces the problem to very simple proportions by suggesting that we should deport our superfluity over-

seas, so as to populate our Colonies and feed our Empire with English blood. Now, Sir, viewing his suggestion under the most favourable circumstances, and even assuming, for argument's sake, that our surplus population comprises for the most part the sturdy and those best adapted for agricultural pursuits, how does the question stand? Our Colonies require us to assist in the cultivation of their land, but this by the very class of emigrant it is to our interest to keep at home to till our own soil, in order to enable us to maintain a much larger population than possible under present conditions. Assuming, however, that your correspondent's suggestions are practical, the fatal and inevitable result of his system would be, that the export of our best blood and the retention in our own country of the inferior (our Colonies selecting the healthy only), including the importation of the wretched class of aliens who of late years have favoured us with their patronage, must necessarily spell national decadence.

As a last word, let me ask your correspondent whether he feels such security in the future (*tempus omnia revelat*), that when our Colonies, with their vast expanses of land, become cultivated, with their corresponding numerous populations, and possess, as no doubt they will, armies and navies of their own, we shall still hold all or any of these colonial possessions as an integral part of the British Empire to which we can send our surplus population? In our efforts to ameliorate present conditions, we must not overlook future possibilities. We should, I think, strive earnestly to retain our best blood by making practical the oft-repeated dictum, "back to the land," for the fuller and more profitable cultivation of its resources, rather than offer encouragement to the thriftless propagation of the weakling.

I am, Sir, yours truly,

CLEMENT H. SERS, M.R.C.S.

Brighton, August 12th, 1909.

#### THE NORMYL TREATMENT.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—This is the last letter with which I shall, for the present, trouble you on this subject. The space you have kindly afforded for the correspondence has, I think, not been wasted. The letters have once more brought to the front the fact that educated and cultivated men, holding distinguished positions in learned professions other than scientific, are very commonly devoid of knowledge of scientific methods, unaware of the meaning of scientific fact, and unappreciative of the character of scientific demonstration. In no direction is application of the most rigorous scientific methods more necessary than in therapeutics, in no direction is scientific scepticism so strongly called for as in regard to the claims of quack remedies. To the unscientific mind, the *post hoc, propter hoc* line of reasoning suffices; whilst the ignorant and credulous public are mostly inclined to accept a blatant statement because it is impossible. Prove to them that Dr. Bogus's pills contain nothing but jalap, and Dr. Swindle's ointment nothing but coloured fat, and they will still urge that they don't care for scientific reasoning, having known cases in which these remedies had cured the worst cases of kidney disease, and the most hopeless cases of cancer, as remedies for which they were advertised. They are like the people described by George Eliot, who will reluctantly admit that, as a rule, two sides of a triangle are together greater than the third side, but will qualify this admission by the statement that, after all, we must be careful, as it is so easy to carry mathematical reasoning too far. That portion of the people whose intellectual calibre is too narrow to enable them to grasp the rudimentary principles of science can only be helped by their leaders; that such leaders are so few in these islands is due to the fact that a great part of our higher classes have a lofty scorn of science; they are not taught to respect it at school, and it is generally ignored in every scheme of education in which a practical knowledge of it is not essential.

I am, Sir, yours truly,

MEDICAL TEMPERANCE REFORMER.

August 13th, 1909.

## OBITUARY.

THEODORE DAVIS, M.D.LOND., F.R.C.S.

By the death of Dr. Theodore Davis, F.R.C.S., the town of Clevedon, Somerset, loses its oldest doctor. Born in 1834, Dr. Davis studied for a time at Queen's College, Birmingham, and afterwards proceeded to London, where he entered St. Bartholomew's Hospital as a student. He passed the required examination for the Fellowship of the Royal College of Surgeons in 1859, and two years later obtained the M.D. degree of London University. Dr. Davis succeeded to his father's practice at Clevedon, and father and son completed eighty years' continuous medical practice in the town.

## SPECIAL ARTICLES.

### THE HEALTH OF DUBLIN.

THE Report on the Public Health of Dublin for the year 1908, by the Medical Officer of Health, Sir Charles Cameron, is a bulky volume of nearly 200 pages, handsomely printed. A great deal of space is taken up with somewhat extraneous matter—extracts from the Registrar-General's Returns, meteorological statistics reported by Sir John Moore, and desultory remarks of one sort or another. A list of the officials and employees of the Public Health Department, from the Lord Mayor to the van drivers, is not impressive, when we notice that the Medical Officer of Health, who is not a whole time official, is left without the help of any medical assistant, or of anyone skilled in public health work, or, as far as we can judge, in bacteriology. It is true that the city dispensary medical officers are supposed to supervise the public health of their respective districts, but it can hardly be supposed that serious duties are expected in return for the nominal salaries given. That some of them do work far in excess of what is expected of them is no defence of the present impossible system.

The birth-rate in Dublin is remarkably high—32 per 1,000 of the estimated population, and shows an increase of 0.7 on the previous year. In London, Glasgow, and other British cities, on the other hand, the birth-rate shows a steady decrease. The excess of births over deaths was 2,739—not, as the Report states, 2,739 "per 1,000 persons living." The deaths in the Dublin registration area were 9,070 in number, of which no less than 3,884, or 42.8 per cent., occurred in workhouses, hospitals, lunatic asylums, and prisons. In the large English towns only about 18 per cent. of the deaths take place in such institutions. The corrected death-rate for Dublin for the year was 23.4 per 1,000 persons living.

Of 7,094 deaths which occurred in the city, 576 were caused by zymotic diseases. The most lethal of these diseases were measles, with 130 deaths; diarrhoeal diseases, with 275; whooping-cough, with 75; and typhoid, with 47. The deaths from diarrhoeal diseases fluctuate from year to year, a hot summer apparently leading to a high mortality. The number of deaths from typhoid shows a considerable increase on the numbers of the immediately precedent years—40, 42, 32, in 1905, 1906, 1907 respectively. This is the more to be regretted as typhoid had declined so much in the past ten years we had begun to hope it might soon disappear. In 1893—a year of great drought, when the Dublin water supply ran short and the citizens were put to straits to get water—the number of deaths from typhoid fever was 218. The following year it was 104, rising in 1898 to 135. From 1899 down to 1907 there was a fairly steady fall, but the number for 1908 is the highest since 1904; 956 deaths from phthisis were registered in 1908. Sir Charles Cameron relates the formation of a Joint Hospital Board representing various bodies in the County Dublin, and the purchase of a site for a sanatorium. What is being done in this matter?

The death-rate for Dublin was 23.4 per 1,000 living, the mean rate for the 20 largest Irish towns being 20.2, and for the 76 largest English towns 14.9. Sir Charles



Cameron appears to suggest that this appalling difference is due to greater poverty in Irish towns. It may be true that poverty is more widespread in Ireland than in England, but it certainly is not true that it is so extreme anywhere in Ireland as in London and certain other of the great English cities. The real difference is, that in England there is some attempt at efficiency of sanitary administration, while in Ireland sanitary administration would be a farce but that it is so fatal in its results. As far as we can learn, in the whole of Ireland there is only one Medical Officer of Health who is paid to give his whole time to his sanitary duties. When one compares the Dublin death-rate with that of some English towns of about the size of Dublin, the comparison is startling. Of approximately equal population to Dublin are West Ham, Nottingham, Bradford, Hull, and Newcastle-on-Tyne. The death-rate in these towns is 13.9, 15.2, 15.5, 16.2, and 16 respectively. In Dublin it is, as we said, 23.4. Again, comparing the mortality in Dublin with that of approximately equal proportions in the London boroughs, we find that Islington, Stepney, Lambeth, Wandsworth, and Camberwell have respectively death-rates of 13.9, 17.1, 12.5, 11.5, and 12.4. Moreover, not a single one of the 76 largest English towns, nor of the London metropolitan boroughs, has a mortality rate above 20 per 1,000.

On looking at the subject of infant mortality, we find that here, too, Dublin has a pre-eminence. In London the infant mortality under one year is 113 among every 1,000 births. In the 75 next largest English towns it is 134. In Dublin it is 146. Moreover, we may add that in Dublin there are comparatively few married women employed in industrial work.

Sir Charles Cameron gives some general notes on tenement dwellings which illustrate the extreme poverty of many of the inhabitants. Forty-four houses were closed during the year as unfit for human habitation.

In the section of the Report dealing with the public baths, we meet with an alarming reference to "three men employed in the baths having died from consumption within a period of 12 months." In view of this, we cannot wonder that the Constabulary authorities ceased for a time to send their men to the baths, giving as a reason the prevalence of sickness amongst "the young policemen attending the swimming lessons."

The expenditure of the Public Health Department for the year ending March 31st, 1908, was £18,190 10s. 11d.

## SPECIAL REPORTS.

### THE SEVENTY-SEVENTH ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION AT BELFAST.

[FROM OUR SPECIAL CORRESPONDENT.]

#### EXHIBITION OF DRUGS, FOODS, INSTRUMENTS, ETC.—(CONCLUDING NOTICE.)

THE exhibits this year were in excess of the usual number, but it cannot be said that there were many novelties, so that our report, brief as we have tried to make it, becomes little else than a repetition of previous essays.

The Miol Manufacturing Co. showed samples of their new preparation, and gave full particulars of the way in which iodine is naturally combined with it, so that no depression is caused by its administration. This nutriment has met with considerable favour by the profession in Ireland, having been found most useful in the early stages of phthisis.

Messrs. Nestlé and Co.'s Swiss Milk and Milo Food are well known, and not less so is Peter's Milk Chocolate, shown by the same firm. We think it somewhat unfortunate that the foregoing preparation (Miol) and Messrs. Nestlé's excellent food for infants (Milo) should have names given them so much alike, the same letters with merely a transposition; this we fear is likely to lead to mistakes and unnecessary confusion.

Messrs. George Mitchell, Ltd., of Dublin and Belfast, showed samples of their smoking mixtures, cigars and cigarettes, already well and favourably known among Irish medical men.

Messrs. J. Morgan, Richards and Sons showed lactopeptine in its various forms, to which fresh additions are constantly being made.

The Saccharin Corporation, Ltd., have in "Novocain" a keen competitor with cocaine for popular favour, and its merits and uses were explained at their stand, which attracted universal attention.

The Angier Chemical Co. showed their popular emulsion of petroleum, and their recently introduced throat tablets of purified petroleum, combined with pure elm bark.

Messrs. Zimmer and Co. showed a number of modern synthetic preparations, some already well known, and others recently introduced, such as validol, euquinine, urosine, and allosan.

Messrs. Ingram and Royle, Ltd., had a wonderful exhibit of natural mineral waters, including about fifty different varieties, some familiar and some which were certainly new to most visitors.

Friedrichshall Water had a stand of its own, showing an array of testimonials which certainly entitled it to its pre-eminence.

The Anglo-American Pharmaceutical Co. showed Huxley's preparations, foremost of which were the various glycerophosphates, combined with pepsin, red bone marrow, hæmoglobin, etc. The Pasteur Vaccine Co.'s biological products were also shown, including their new "Fermentactyl." This firm were in a peculiarly unfortunate position, as only a day or so before the exhibition opened, their extensive laboratories at Croydon were burned to the ground, rendering it almost impossible to keep their stand fully supplied for this meeting.

Messrs. H. and F. Kirby showed Purgen, their "ideal purgative," in its different strengths, and their "Ideal Valve" feeder, in which the valve is of solid glass, and cannot leak or fall out.

Liebig's Extract of Meat Co. showed their familiar Lemco and Oxo and several newer preparations for household use, such as Fray Bentos ox tongues, corned beef, etc., and "Bifti," a penny pure beef tablet for making gravy or soup.

At Stand No. 76, A. Wander, Ph.D., exhibited some preparations, which appeared to be novelties to many present, if one might judge of the interest that seemed to be centred in the display. It is claimed for "Ovaltine" that it is a complete food, containing every dietetic element required by the human organism, prepared in the form of a granular powder. This manufacturer also showed his new preparation of dry extract of malt, and of "Formitrol," a safe and pleasant form for the administration of formaldehyde in chronic and acute pharyngitis.

A new exhibitor at these annual meetings occupied Stand No. 18 with an imposing display of special medicinal waters. Messrs. Findlater and Co. are now the special agents for many Continental waters hitherto little known in this country, but which are now being brought to the front. Carabana, an aperient of considerable strength; Wildungen, the favourite water in Germany for kidney and bladder troubles, and Royal Ems, a favourite in catarrhal affections of the mucous membranes, etc.

## MEDICAL NEWS IN BRIEF.

### The Forthcoming International Medical Congress.

THE preliminaries of the Sixteenth International Medical Congress to be held at Buda Pesth on August 29th are practically arranged, and the executive committee is engaged in preparing a detailed programme of the various functions and fêtes. Particular care has been taken with regard to the accommodation of the congressionists, and a great number of hotel rooms and others have been reserved by the Central Travelling Ticket Office (V. Vigadó-ter, 1 Buda Pesth) on behalf of those who have not yet sent in their

adhesions and subscriptions. At the same time it will be well for all intending visitors to write in advance in order to profit by the railway and steamboat companies' reduced fares and other advantages offered to members of the assembly. Any further information may be obtained (up to August 19th) from the Secretary-General of the Congress: VIII. Eszterházy-utca, 7, Buda Pesth; and after that date: VIII. Muzeum-körút, 6/8, Buda Pesth.

#### The Success of Sanatorium Treatment.

At the annual meeting of the governors of the West Wales Sanatorium, held at Carmarthen a few days since, the Medical Superintendent (Dr. Adams) submitted his report for the past six months, in the course of which he said with regard to the 30 patients who had been discharged during the period, the results were more than satisfactory. They were infinitely better than he in his most sanguine mood ever anticipated. Half of them were back at the work they were doing before they broke down in health; eight, acting on his advice, had changed their occupation, whilst three who were quite fit for work but were not obliged to do so. One died of a complication after leaving the Sanatorium, and the other three were discharged as unsuitable cases, and were now practising the treatment they learnt at the institution at home. The letters he had received from the discharged patients were most gratifying. He was glad to report that not nearly so many hopeless cases were being recommended for treatment. It seemed as if medical men were realising the importance of only sending early cases.

#### Guardians and Medical Officers.

A PROPOSAL of the Chorlton Board of Guardians that representations should be made to the Local Government Board in favour of allowing all medical men to act as district medical officers and public vaccinators, and to be paid at a scale to be fixed by the Guardians, was brought before the meeting of the Finance and General Purposes Committee of the Salford Guardians.

On Friday last Mr. Dobson said that such a system was in operation in Scotland, and suggested that further information should be obtained.

Mr. Bescoby, who said that the resolution of the Chorlton Union was brought forward by the Socialist section, moved that no action should be taken. Such a system, he thought, would open the door to a good deal of corruption.

The motion to take no action was adopted.

The question of payment to the Poor-law Relieving Officers for the additional work entailed by the inquiries under the Old Age Pension Act was deferred.

#### Hospital Treatment Experiment at Coventry.

A SCHEME of continued hospital treatment, which appears to have much to commend it, is being tried as an experiment at Coventry. The hospital authorities are sending their convalescent patients to farmhouses to recuperate, and so far the results have been eminently satisfactory. In most small towns no recognised system exists for dealing with patients after they are able to dispense with the regular attention of a medical man; and Birmingham itself was not much better off until the establishment and development of the work of the Hospital Saturday Fund. The obvious advantage of the Coventry plan is that the individual effort of the poor is assisted, and that the convalescent patient is kept under medical supervision, and adequately and properly provided for in the way of food. It is not within the power of many towns to possess, as their own property, homes of rest at the seaside, so that the country farm-house hiring system would appear to be the next best thing, as it achieves beneficent results without incurring a big financial responsibility.

#### Drunk or Dying.

An inquest was held at Camberwell, on August 13th, respecting the death of Annie Labrun, wife of an engineer living in Warner Road. Late on the night of Bank Holiday, it was stated, Labrun and his wife

were returning home, when the woman fell in a faint. As the husband was assisting his wife into a cab, two constables arrived, and, accusing him of being drunk, took him to the station. Labrun, in his evidence, stated that he was ill-treated. When his wife was brought in on an ambulance he protested that she was ill. He was thereupon seized and placed in a cell for the night. Next day he was fined at the police court. Police-Constable Baker described the arrest of Labrun, and said the deceased was drunk. The Coroner: How did you find that out? Witness: She smelt strongly. The Coroner: That is no proof. Witness sent for the ambulance, and took deceased to the station, where she was charged. The Coroner: Was a doctor sent for?—Witness: No. Why?—She did not ask for one. Police-Sergeant Curtis said that he visited deceased several times during the night. At twenty minutes past seven o'clock he thought she was not making so much progress as "drunks" ought to, and he sent for the divisional surgeon. At ten o'clock she was worse, and the doctor ordered her to the infirmary. Dr. J. C. Keats, Medical Officer at Camberwell Infirmary, said that he received deceased and found her in a dying state. She died last Tuesday as the result of a fractured skull. The Coroner: I can see how it happened. Deceased fell, a police constable comes up and says she is drunk, the husband denies it, gets excited, etc.

The jury returned a verdict of "Accidental Death," and added that there was no proof that deceased was intoxicated at the time. They were also of opinion that a doctor should be called in in all cases of this kind.

#### Spring Water and Typhoid Fever.

THE Oldham Medical Officer of Health (Dr. Wilkinson) has issued a warning to the Health Committee on the danger of holiday-makers drinking water from country springs. He said it was a common thing for people when they found what looked like a clear spring to take a drink. During the past week two cases of typhoid fever had been reported, which were probably due to drinking water from a spring in the Saddleworth district.

#### Questions in Parliament.

Sir William Collins asked the Home Secretary whether he was aware of the extensive use of tetra-chloride of carbon as a hair-wash; whether his attention had been called to a recent death of a young lady while her hair was being shampooed with this compound; whether his attention had been directed to the poisonous properties of carbon tetra-chloride; whether any restrictions upon the sale or use of this compound at present exist; and whether he proposed to take any steps in the matter.

Mr. Gladstone replied:—My attention has been called to the use of tetra-chloride of carbon as a hair-wash, to the very great danger involved, and to the death referred to by my honourable friend. I am informed by the Privy Council that tetra-chloride of carbon is not a poison within the meaning of the Pharmacy Acts, and there are, therefore, no restrictions as to its sale. As regards the steps to be taken in the matter, I can only say that the Director of Public Prosecutions has the question of a prosecution now under his consideration.

#### Death After Chloroform.

At Holborn, on August 13th, Mr. Schroder held an inquest on the body of Eric Sidney Rolfe, the 18 months' old son of a stationer's assistant living at Bushey.

The child was admitted to the Hospital for Sick Children, Great Ormond Street, on Monday, to undergo an operation, which was performed on the following day, the patient being anaesthetised with chloroform. The child recovered quite normally, said Dr. Mills, the House Surgeon, and went on well until Wednesday afternoon, when symptoms strongly suggesting the after effects of chloroform developed. Death took place on Wednesday night, and the post-mortem examination showed that it was due to heart failure resulting from delayed chloroform poisoning.

Nothing further could have been done to guard against it.

The jury returned a verdict of "Death from misadventure."

The Coroner observed that these cases of chloroform poisoning were very rare, about one in two years coming under his notice out of many thousands of operations.

#### Mortality from Measles.

At a meeting of Darlaston Urban Council, on August 10th, the Medical Officer of Health (Dr. S. Partridge) reported the high death-rate of 27 per 1,000, and stated that out of 33 deaths 20 were due to measles and one to scarlet fever. The latter disease had now practically subsided, but there had been a considerable increase in measles, the chief obstacles in combating which were the difficulty of distinguishing the initial stages from an ordinary cold, the impossibility of obtaining adequate isolation in a working-class population, and the indifference of parents. The summer school vacation would, it was hoped, assist in stamping out the disease.

#### Tuberculosis in Paris.

In an official report addressed to the Préfet of the Seine, M. Juillerat, Head of the Administrative Bureau of the Sanitary Service of the City of Paris, notes that the number of deaths from pulmonary tuberculosis which occurred in Paris last year was 10,263. These figures are the same as for 1907. As the population has slightly increased, it may be concluded that consumption has decreased somewhat.

M. Juillerat states further that during the two and a half years he has been studying the question whether cancer is contagious or not he has noticed that it has a marked tendency to return to houses already visited by it.

#### The King's "Cure."

THE King, with the members of his suite, arrived at Marienbad on August 11th. The season is now at its height, and the town is crowded with visitors of all nationalities, including many British and Americans. This is the King's ninth visit to Marienbad.

In view of the heat, the King left the train at Eger and motored to Marienbad. In the large hall of the Hotel Weimar, to welcome His Majesty, were assembled Sir Fairfax Cartwright, British Ambassador in Vienna; the Hon. T. Russell, Bezirkshauptmann Prince Liechtenstein, Praelat Helmer Abbot of Tepl, Burgomaster Dr. Heinrich Reiniger, Captain Frankl, of the Austrian Navy; and other municipal authorities. Dr. Ott certifies the King to be in excellent health.

#### Gresham College.

THE City Corporation of London have decided to close Gresham College. The site will be advertised for sale, and the proceeds devoted to the establishment of scholarships and the delivery of lectures. The Gresham Trust was founded by Sir Thomas Gresham, the creator of the first Royal Exchange, which was opened in 1568. A scheme has lately been under discussion for the remodelling of Gresham College, but this has been abandoned. The site of the college is valued at over £50,000.

#### University of London.

THE following candidates have passed the First Examination for Medical Degrees (alphabetically arranged):—

D. R. Alexander, Elizabeth L. Ashby, F. M. Barnes, Irene Bastow, W. R. Blore, J. Bostock, G. K. Bowes, Alice D. Brooks, F. C. S. Broome, O. D. Brownfield, Isabel F. Buckle, W. Burt, F. W. Chamberlain, H. G. Chaplin, J. E. Cheesman, H. A. De Morgan, A. R. C. Doorly, C. H. Edwards, A. F. El-Hakim, R. Ellis, P. O. Ellison, H. J. O. Ewing, C. H. Gould, D. W. Griffith, Mary E. Harding, J. R. Harris, C. C. Harrison, H. W. Hay, H. L. Hitchings, A. G. Holman, H. J. Hoyte, C. E. Jenkins, K. W. Lewis, O. C. Link, I. H. Lloyd-Williams, R. J. McN. Love, N. P. L. Lumb, W. F. MacAlevey, J. N. Mehta, J. Y. Moore, A. D. Morris, P. T. Patel, T. B. Paul, I. H. Pearse, J. L. Priston, C. E. Procter, F. T. Rees, R. E. Roberts, J. A. Robinson, W. E. R.

Saunders, H. R. Sheppard, R. H. Simpson, J. S. Sloper, E. S. Sowerby, C. W. Sparks, J. E. Stacey, G. Stapleton, J. Stephenson, W. E. Taylor, N. Tribe, H. P. Whitworth, G. R. C. Wilson, A. G. Winter, H. G. Winter.

The following students, who took a portion of the Examination under old regulations, have now completed it:—

W. C. P. Barrett, T. D. C. Barry, F. V. Bevan-Brown, Ursula P. Blackwell, P. Butler, Y.-J. Cieh, A. S. Cohen, Dora C. Colebrook, M. B. Cooper, S. A. Cornelius, J. K. Davies, C. F. Hacker, S. S. B. Harrison, L. Kingdon, R. W. Little, D. M. MacManus, G. Matthews, A. N. Minns, J. E. Pearce, S. H. Robinson, G. W. R. Rudkin, E. A. Scott, G. D. Shann, M. U. Wilson, S. Y. Wong.

The following have passed the Second Examination for Medical Degrees, Part I:—

B. W. Armstrong, J. R. Barrow-Clough, R. M. Beath, K. Biggs, P. Butler, G. M. Campbell, A. H. Christie, J. A. Cowan, M. J. Cronin, F. E. Daunt, H. W. Davies, H. F. Davies, J. Y. Dent, G. D. Eccles, H. T. Evans, W. S. Evans, F. R. Fletcher, W. B. Foley, K. M. L. Gamgee, G. A. Gassmann, F. A. M. J. Goldie, U. Griffin, R. L. Horton, R. O. H. Jones, M. A. Jukes, R. M. Kharegat, W. J. T. Kimber, E. P. Langley, E. A. C. Langton, C. Leatham, W. Leslie, E. D. Lindow, M. A. Lloyd, H. R. Lowenfeld, A. G. Maitland-Jones, R. Mallet, L. A. Martin, G. S. Miller, W. E. Milligan, D. E. Morley, Edith M. N. Moss, C. E. Petley, J. A. Poole, Edna M. Powell, R. A. Preston, J. B. Randall, Winifred M. Ray, L. N. Reece, F. C. Robbs, C. S. L. Roberts, G. H. Roberts, H. C. Rook, J. A. Ryle, E. D. Scott, C. Sherris, A. J. E. Smith, H. E. Smith, M. E. E. Smith, S. Smith, W. H. D. Smith, W. C. Spackman, C. K. Sylvester, H. Taylor, J. R. K. Thomson, T. B. Vaile, Mary A. Van Ingen, H. C. Viehoff, E. W. Wade, A. S. Wakely, J. R. M. Whigham, J. D. Wilkinson, J. D. Wilkinson, A. Wills, A. Wilson, O. R. L. Wilson, A. W. Woo.

#### Royal College of Physicians of London.

THE following candidates, having passed the required examinations, have been admitted members of the College:—Edwin Greaves Fearnside, M.A., M.B. Cantab, London Hospital; William Errington Hume, M.B. Cantab, London Hospital, and Berlin; James Lindsay, M.D., Edinburgh University; Henry MacCormac, M.B., Edinburgh University; Walter Malden, M.A., M.D. Cantab, M.R.C.S., St. Bartholomew's Hospital; Arthur Hallows Miller, M.A., M.B. Cantab., Guy's Hospital; Patrick Thomas O'Sullivan, M.D., Royal University of Ireland, Queen's College, Cork; Leonard Gregory Parsons, M.D. Lond., L.R.C.P., M.R.C.S., Birmingham University.

#### Royal Army Medical Corps.

THE following is a list of successful candidates, arranged in the order of merit, for Commissions in the Royal Army Medical Corps at the recent examination in London, when 54 candidates entered:—

G. H. Dive, St. Bart's Hosp., M.R.C.S., L.R.C.P.; L. C. Hayes, Birmingham Univ., L.R.C.P. Lond., M.B. Birm.; B. G. Goodwin, Birmingham Univ., M.R.C.S., L.R.C.P.; A. S. Cane, Camb. and St. Bart's, M.R.C.S., L.R.C.P., B.A. Camb.; T. H. Dickson, Edin. Univ., M.B., B.Ch. Edin.; K. Comyn, Camb. and K. Coll. Hosp., M.R.C.S., L.R.C.P., B.C., B.A. Camb.; F. R. Laing, Edin. Univ., M.B., B.Ch. Edin.; A. G. Jones, Guy's Hosp., M.R.C.S., L.R.C.P., M.B., B.S. Lond.; J. M. Weddell, Camb. Univ., M.R.C.S., L.R.C.P., B.A. Camb.; P. C. Field, Bristol and Guy's Hosp., M.R.C.S., L.R.C.P.; V. P. Hutchinson, Guy's Hosp., M.R.C.S., L.R.C.P.; T. W. Stallybrass, Newcastle-on-Tyne, M.B., B.S. Durh.; H. G. Robertson, Glasgow Univ., M.B., B.Ch., B.Sc. Glas.; R. C. G. M. Kinhead, Queen's Coll., Galway, M.B., B.Ch., R. Univ. I.; C. M. Nicol, Glasgow Univ., M.B., B.Ch. Glas.; H. V. Stanley, Trinity Coll., Dub., M.B., B.Ch., B.A. Dub.; E. C. Stoney, Sir P. Dun's Hosp., M.B., B.Ch., B.A. Dub.; A. P. O'Connor, Catholic Univ., M.B., B.Ch., B.A., R.U.I.; R. M. Davies, Durham Univ., M.B., B.S. Durh.; R. Gale, Glasgow Univ., M.B., B.Ch. Glas.

## SUMMARY OF RECENT MEDICAL LITERATURE, ENGLISH AND FOREIGN.

*Specially compiled for THE MEDICAL PRESS AND CIRCULAR.*

**A Case of Bilateral Pelvic Abscess during Pregnancy.**—Donald (*Journ. Obst. and Gyn. Brit. Emp.*, XVI., 1).—The patient was seven months pregnant and for some weeks had looked and felt ill, for a few days she had suffered from severe pain in the lower part of the abdomen with considerable distension and a temperature running up to 103 deg. She was confined of a premature child and improved, but the temperature was still erratic, sometimes over 103 deg. Examined a few days after confinement nothing could be found in the pelvis to account for the symptoms. Three weeks later two rounded swellings, each about the size of a small orange, could be felt at either side of the uterus, giving a feeling of fluctuation. These were subsequently opened through the anterior fornix and a free discharge of pus obtained. The patient improved considerably, but still the temperature kept up, although not so high as it had been. The local discharge soon ceased and the local condition seemed good. A month after operation the patient had a sudden abdominal attack. The abdomen was opened and some free pus found which had evidently come from the right tube which was perforated and very friable. The pelvis was drained and the patient made a good recovery. It is difficult to understand the co-existence of pregnancy with an abscess in the appendages of each side, and the question arises whether there existed a salpingitis before pregnancy or whether there was an infection during the early months of gestation. The history did not throw any light on this problem.

F.

**Primary Chorionepithelioma of the Ovary.**—Fairburn (*Journ. Obst. and Gyn. Brit. Emp.*, XVI., 1).—The patient, æt. 25, was married five years, and had three children and one miscarriage between the first and second child. The placenta had to be removed by hand at the confinement and three weeks afterwards she developed white leg. The child was nursed for 12 months and after weaning menstruation recommenced. The first period was normal, the next followed in three weeks, and from then there was continuous slight loss nearly every day, at no time was this loss excessive or such as to suggest that there had been a miscarriage. This state of affairs continued for nine months when she had an attack of influenza. When she began to get about pain developed in the left side and lower part of the abdomen. About one month later a tender lump was noticed on the left side. On opening the abdomen the tumour was seen covered with a white capsule, it was very adherent, especially about the level of the pelvic brim and burst during its separation allowing the escape of material so like blood clot that it at once suggested ectopic gestation. When isolated it was found to be a growth of the left ovary. Microscopically the greater part of the growth was found to be made up of blood clot fibrin and necrotic tissue. The chorionepitheliomatous structure is seen best in portions taken from just under the capsule. Although the patient had been pregnant four times there is no history to indicate anything of the nature of cystic mole or of chorionepithelioma elsewhere. The uterus and vagina were apparently free, and the fact that no other growths have occurred, though over two years have elapsed since operation, seems to be proof that the growth was solely and primarily one affecting the left ovary. The writer compares his case with two others reported by Assmuth from Tübingen, and by Iwase from Munich Frauenklinik. He would accept Pick's view as to the possible origin from the transportation of villi from a normal placenta,

as his case and the two referred to were multiparæ, and in two of them manual removal of the placenta had to be practised in the labours immediately preceding the commencement of symptoms.

F.

**A Short Experience of Scopolamine Morphine Narcosis in Labour.**—Croom (*Journ. Obst. and Gyn. Brit. Emp.*, XVI., 1).—The experience extends over 62 cases. As to the dosage, at first 1/400 of a grain of scopolamine and 1/6 grain morphine was given, but these cases were found to be unsatisfactory, the patients all complained of excessive thirst. The effect upon the child was absolutely nil. Then doses of 1/200 scopolamine and 1/6 morphine were tried. The result was a greater diminution in the painfulness of the contractions, and the patients slept in the intervals between the pains, the children were in all cases born vigorous. Afterwards the dose was increased to 1/100 of a grain with 1/6 and the results were much more satisfactory. The painfulness of the contractions was markedly diminished, in some cases abolished, the patients slept soundly in the intervals between the pains and in most cases for one or two hours after the completion of labour. 70 per cent. of the children in these cases were born vigorous, 27 per cent. required slight reviving and 3 per cent. required thorough resuscitation. No children were lost. With the doses of 1/200 or 1/100 there were no complaints of thirst as with the 1/400 dosage. In 37 cases, one injection of the drugs was sufficient. In the other 25 cases one or other or both drugs were repeated in doses varying in the case of scopolamine from 1/400 to 1/100. The repetition of the scopolamine prolonged and slightly deepened the effects upon the mother and child, but the repetition of the morphia caused a much more distinct increase in the effects, particularly on the child, so much so, that latterly the repetition of morphia was entirely given up. The drug was mainly given in the second stage of labour and had a three-fold result, it acted as a soporific, it produced narcosis and in some cases complete anæsthesia, it abolished remembrance of the suffering during labour. In two cases with two injections of scopolamine forceps were applied and the patients delivered without any suffering. In the 63 cases chloroform was administered in 10, of these 4 were forceps cases, two required repair of the perinæum, one was for version, one was a rickety flat pelvis with a breech, and one required chloroform, on account of the patient becoming very noisy, another on account of extreme pain towards the end of the second stage. The only untoward effect was that the child was often born sleepy and almost comatose and remains so for some time after birth. The child is not actually still-born, but it breathes only slowly, does not cry, and has all the appearance of being under narcotic influence. There may, perhaps, be a slight tendency to post-partum hæmorrhage. In three cases that was noticeable, though not to any dangerous extent. None of the cases were totally insusceptible to the drug. Except in cases which responded markedly to the drug, it was distinctly desirable to give chloroform if anything in the nature of operative interference is necessary. As regards the effect on labour the drug did not seem to hasten or delay its progress. In patients who are physically weakened and unfit, the method may be accompanied by some risk, and such cases require to be carefully watched all through. For an ordinary case the best dose was 1/200 scopolamine plus 1/6 morphine, and the scopolamine may require to be repeated in one and a half or two hours in 1/200 of a grain dose.

F.

## NOTICES TO CORRESPONDENTS, &c.

Correspondents requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

### SUBSCRIPTIONS.

SUBSCRIPTIONS may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s.; post free at home or abroad. Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially-appointed agents. Indian subscriptions are Rs. 15.12. Messrs. Dawson and Sons are our special agents for Canada.

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CONTRIBUTORS are kindly requested to send their communications, if resident in England or the Colonies, to the Editor at the London office; if resident in Ireland to the Dublin office, in order to save time in reforwarding from office to office. When sending subscriptions the same rule applies as to office; these should be addressed to the Publisher.

A. K. C.—(1) Thank you for note and compliment. (2) There are about 25,000 deaf mutes in England. Under modern methods of education it is possible to train these persons to a high intelligent pitch, and to enable them to apprehend and to express complicated abstract ideas in a most astonishing way. You had better apply to the Secretary of the British Deaf and Dumb Association.

### A PAUPER OBJECTION TO COLOUR.

A LEICESTERSHIRE PRACTITIONER.—We have perused the remarkable protest signed by fifteen pauper patients of the Lutterworth Union and presented to the Local Government Board. It protests against the action of the local guardians in appointing Dr. J. C. Bhukerchagi, a native of India, as Medical Officer to certain districts within their Union. We are glad to see that since your letter reached us, the guardians, having had an opportunity of seeing the petition in question, replied by a unanimous vote of confidence in their officer. Any other course would be, in our opinion, not only impolitic, but unjust to the last degree. At the same time it is obvious that anyone starting practice under peculiar conditions of the kind in point, must be prepared for various rebuffs, especially from ignorant and prejudiced persons.

R. S. MCGUBBIN.—The case is indeed a good one. It would be well to apply to the various charitable agencies, founded for the benefit of the families of deceased medical men. Every married practitioner in the metropolis should certainly join the Royal Medical Benevolent Fund.

### CORONERS AND DEATHS FROM ANÆSTHETICS.

A SHORT interim report has been issued by the Departmental Committee, appointed to inquire into the law relating to coroners and inquests and the practice of their courts. The report presents the evidence so far given with regard to deaths in connection with anæsthetics and from the use of flannellette clothing. The important question of deaths under anæsthetics will be further investigated, and some time will probably elapse before any definite conclusions are arrived at.

MR. J. W. (Bradford-on-Avon).—Your communication contains such absurd statements founded on wrong premises, that it would be an insult to our readers to insert it.

DR. K. G. W. is thanked for the card of invitation, which we hope to be able to accept. In the present holiday season, however, it is not always feasible to send a responsible representative.

### KISSING THE BOOK VERSUS THE SCOTCH LAW.

A LIVERPOOL correspondent writes us that a change in the method of taking the oath in Courts of Law appears to be making progress. It may be recollected that some time ago the members of the Liverpool Medical Institution, on the initiative of Dr. Fred Lowndes, passed a resolution condemnatory of the "kissing the Book," and in many cases dangerous custom of "kissing the Book." This resolution was carried into practice at the recent assize, when in one of the cases tried before Judge Hamilton, in which medical evidence was required, three medical men requested to have the oath administered in the Scotch way. The change is a very desirable one, and if the medical men themselves practice what they preach, the thinking portion of the community will not be long in following their example.

W. B. PHILLIPS (Croydon).—Last week a Bill was introduced into the House of Commons by Mr. Peel with the view of enabling the Metropolitan Asylums Board, in conjunction with the Commissioner of Police of the Metropolis, to establish an ambulance service for the County of London.

## Appointments.

IRELAND, ARCHIBALD EDWARD, M.R.C.S., L.R.C.P.Lond., D.P.H. Oxon., Medical Officer of Health and Government Bacteriologist, Suva, Fiji.  
LLOYD, BRIMLEY R., M.B., B.S.Lond., D.P.H., Medical Inspector of Schools at Sheffield.  
NASH, E. H. T., M.R.C.S., L.R.C.P.Lond., Medical Officer of Health of Wimbledon.  
RUSSELL, R. F., M.B., B.S.Aberd., Certifying Surgeon under the Factory and Workshop Act for the Ollaberry District of the county of Zetland.  
EMRYS-JONES, F., B.A.Oxon., L.M., has been appointed conjoint Medical Officer in charge of the X-Ray and Light Departments of the General and Queen's Hospitals, Birmingham, and Honorary Radiographer to the Guest Hospital, Dudley.

## Vacancies.

City of Leeds Infectious Diseases Hospitals and Sanatorium.—Resident Medical Officer. Salary £120 per annum, with board, lodging, and washing. Applications to the Medical Superintendent, City Hospitals, Seacroft, Leeds.  
Sunderland and Durham County Eye Infirmary, Sunderland.—House Surgeon. Salary £210 per annum. Applications to J. F. Potts, Secretary, Sunderland and Durham County Eye Infirmary, Stockton Road, Sunderland.  
Dorset County Hospital, Dorchester.—House Surgeon. Salary £100 per annum, with board and residence. Applications to W. E. Groves, Valetta, Icenway, Dorchester.  
Brenty Certified Inebriate Reformatory, Westbury-on-Trym, Bristol.—Superintendent. Salary £300 per annum, with board and quarters. Applications to the Hon. Secretary, 34 Westbourne Gardens, London, W.  
Southwark Union, London.—Assistant Medical Officer. Salary £100 per annum, with board, lodging and washing. Applications to Sydney Wood, Clerk, Union Offices, John Street West, Blackfriars Road, S.E.  
Jaffray Branch of the General Hospital, Gravely Hill, near Birmingham.—Resident Medical and Surgical Officer. Salary £150 per annum, with board, residence, and washing. Applications to the House Governor, General Hospital, Birmingham.  
University of Birmingham (Faculty of Medicine).—Professor of Anatomy. Salary £800 per annum. Applications to Geo. H. Morley, Secretary.  
Nottingham General Dispensary (Branch).—Assistant Resident Surgeon. Salary £160 per annum, with apartments, attendance, light and fuel. Applications to C. Cheesman, Secretary, 12, Low Pavement, Nottingham.  
Hamlet of Mile End Old Town.—Assistant Medical Officer. Salary £150 per annum, with board, lodging, and washing. Applications to Benjamin Catmur, Clerk to the Guardians, Guardians Offices, Bancroft Road, Mile End, E.

## Births.

BOXALL.—On Aug. 13th, at Rudgwick, Sussex, the wife of Frank Boxall, M.R.C.S., L.R.C.P., of a daughter.  
PRINS.—On August 4th, at the Hospital Bungalow, Galle, Ceylon, to Dr. and Mrs. Lorenz Prins—a daughter.  
ROBERTSON.—On August 10th, at Grand Turk, Turks Islands, B.W.I., the wife of T. R. Robertson, M.B., Ch.B., of a son. (By cable.)  
SEALY.—On August 1st, at Loralai, Beleuchistan, the wife of Major Sealy, I.M.S., of a son.  
STONE.—On Aug. 18th, at 30 Nevcrn Square, London, the wife of Major C. A. Stone, R.A.M.C., of a daughter.  
WOLSELEY-LEWIS.—On Aug. 13th, at The Asylum, Maldstone the wife of Dr. Wolesley-Lewis, F.R.C.S., of a daughter.

## Marriages.

ALCOCK-BEARDMORE.—On Aug. 11th, at the Parish Church of Ripple, Kent, Frank Alcock, of Lincoln, M.D., son of the late John Alcock, M.R.C.S., J.P., Staffs., and of Mrs. Alcock, May Bank, Stoke-on-Trent, to Gladys Leslie, only daughter of Rev. Henry Leslie Beardmore, M.A., Rector of Ripple.  
KIDD-BURTON.—On Aug. 12th, at St. Cuthbert's, Philbeach Gardens, London, Archibald William Lyle Kidd, only son of the late Archibald Napier Kidd, M.R.C.S.I., Armagh, Ireland, to Francis Sophia, only daughter of the late Joseph Stewart Burton, M.R.C.S., L.S.A., of Blackheath and Reigate.  
STEWART-HULME.—On Aug. 11th, at All Saints' Church, Marple, George Irvine Thompson Stewart, M.B., F.R.C.S.Eng., youngest son of Sir David and Lady Stewart, Banchory Deuinick, Kincardineshire, to Gertrude, third daughter of the late James Hulme, Esq., of Brabyns House, Marple, Cheshire.  
TEICHMANN-HARBORD.—On Aug. 11th, very quietly, at St. Margaret's, Westminster, Oscar Teichmann, M.A., M.R.C.S., L.R.C.P., son of Emil Teichmann, of Sitka, Chislehurst, Kent, to Edith Henrietta, daughter of the late William Harbord, of Liverpool.

## Deaths.

DAVIS.—On Aug. 11th, at his residence, at Walton-in-Gordano, Clevedon, Somerset, Theodore Davis, M.D.Lond., F.R.C.S. Eng., aged 75 years, son of the late Dr. Theodore Davis, of Clevedon.

# THE MEDICAL PRESS AND CIRCULAR.

"SALUS POPULI SUPREMA LEX."

VOL. CXXXIX.

WEDNESDAY, AUGUST 25, 1909.

No. 8.

## NOTES AND COMMENTS.

### Vaccination and Compensation.

AN anti-vaccinationist correspondent sends us some information of a case which shows an interesting anomaly in the laws which govern the land. It seems that a milkmaid acquired cow-pox in the pre-Jennerian fashion namely, by milking cows. Against the farmer she claimed damages for the injury inflicted on her, with the result that she was awarded £20. In the absence of precise details as to the exact nature of the disease and of the legal process involved, we take the facts as stated, and it cannot but be admitted that it is an odd state of things that, whereas the law lays down that it is the duty of every person to be vaccinated, it should be considered an actionable wrong for a person to become accidentally vaccinated by contact with a man's cows. The logical reasoning would seem to be that if the milkmaid suffered any loss of employment through the inoculation of the hand, that would be set off by the advantage she gained by being rendered immune to small-pox infection for a term of years. If this action became a precedent, perhaps we shall one day see infants suing the public vaccinator by their "next friend" for causing them needless annoyance and suffering in the pursuit of their legitimate occupations of sleeping and feeding.

### Welsh Bone-setter.

IN a case reported from Wales last week there is much food for reflection in connection with unqualified practice. A farm servant was knocked down by a horse and sustained a compound fracture of the thigh. A medical man was sent for, but the messenger was stopped when it was thought the thigh was fractured, and a bone-setter was summoned instead. A few days later the medical man was asked to attend as the man was not going on well, and on arrival he found the patient at the point of death. At the inquest which ensued he gave evidence, saying that the thigh was tightly bandaged, the parts above being blue and swollen, while the leg below was swollen, cold, and pulseless. Underneath the bandage were three pieces of cardboard "embedded in the skin" and a piece of wood. There was also a discharging wound. Death ensued shortly afterwards of acute blood-poisoning following compound fracture of the thigh. After the bone-setter had given evidence, in which he said that he had treated hundreds of broken limbs, but never one like this, the Coroner, in his summing-up, said that if a person, qualified or unqualified, undertook to look after a case, he was bound to exercise a proper amount of diligence, and if the jury thought the bone-setter had been guilty of gross ignorance and neglect they should return a

verdict of manslaughter. After retiring, the foreman said they were unanimously of opinion that no blame whatever attached to the bone-setter. On these circumstances we can only say that if a jury is unanimously of opinion that no blame whatever attaches to a person who undertakes a case like this and treats it in the manner described, no powers the legislature might give would secure the suppression of unqualified practice.

### Insurance and Health.

A REMARKABLE departure from the ordinary routine of life insurance is reported from New York. "A big insurance company"—the name is not stated—has, it is said, decided to establish a health bureau, including free medical examinations, with the idea of prolonging the lives of policy-holders, and to develop original research into the prevention of disease and the discovery of threatened disease in time to effect cure. Medical men have been engaged to serve on the staff, and a circular letter is being sent round emphasising general rules for retaining good health and improving bad. Further, we are told, other companies are likely to follow suit, "when it is shown that both insured and insurer are benefiting by the health bureau." Pessimistic it may sound to dwell with too much stress on the word "when," and if the scheme is really started we shall watch the experiment with great interest. We do not understand how it will work without conflicting with the interests of the general practitioners, who are hardly likely to be pleased if they are deserted by their patients in favour of the bureau doctors. Nor, unless we are to understand that the latter are specially endowed, are they likely to be able to do much more to nip disease in the bud than their fellows.

### Preventing Disease.

IT is hardly probable that healthy people who have insured their lives will submit to periodical medical examinations on the chance of something being found wrong with them which may be alleviated by early treatment; human nature being what it is, most men would rather not be aware that their urine contained a trace of albumin, let us say, than that constant search should be made to discover it. Moreover, a person constantly under medical supervision would have less chance of taking out a further policy than a person not so supervised, for any defect discovered, even if cured, would tell against him. It is not our business to criticise the business side of such an insurance development, but we candidly do not see how the office is ever to see its money back. Regularly to examine all policy-holders and to advise them would need a large and expensive staff throughout the States, and it is to be feared that,



most of the interviews being routine formalities, there would be a great tendency for the examinations to become perfunctory. Still, there is no necessity, in our view, to contemplate the minor disadvantages, as it is expecting too much even of the neurotic American to think that he will run his course under the watchful eye of a doctor not even chosen by himself.

#### An Enemy of the People.

READERS of Ibsen will remember how Dr. Thomas Stockmann, medical officer of the baths of his native town, made the discovery that the water of the baths was being poisoned by sewage contamination. Like an honest man he set himself to remedy the matter, but to his intense surprise found himself hampered by the reluctance of the Burgomaster and other prominent citizens to permit any knowledge of the facts to become public, since the welfare of the town was dependent on the reputation of her baths. The town rose against him, and he was denounced as "an enemy of the people." A similar series of events occurred not long ago in San Francisco when medical men, who ventured to diagnose cases of plague correctly, were denounced and driven from their employment. In somewhat similar fashion the exertions of the Countess of Aberdeen and those working with her to stay the progress of tuberculosis in Ireland have roused violent opposition in several quarters. It is asserted that, owing to the publicity given to the condition of the country by Lady Aberdeen's exertions, tourists are afraid to come to the country, that hotels are consequently losing heavily and that Irish servants are unable to obtain employment in England. We have no reason to believe that there is any truth in these loud complaints, but even if there were it would be a small price to pay for freedom from tuberculosis. There is good reason to believe that even already the exertions of the last two years have borne fruit in the saving of life, the Registrar-General's returns for last year showing a decided improvement on those for recent years. It is not to be forgotten, however, that the rate of mortality is still one of the highest in Europe.

## LEADING ARTICLES.

### "CHRISTIAN SCIENCE" AND MRS. EDDY'S MONEY.

THE growth of science of any kind appears fated by some immutable law of life, to be haunted by the untiring shadow of charlatanism. Of all the astonishing pseudo-sciences that thrive at the expense of the community, there is none more fatuous and amazing than the grotesque gospel known as Christian Science. Its foundress, Mrs. Eddy, apparently chose that name on the principle of *lucus a non lucendo*, inasmuch as it would be impossible by any process of correct, that is to say, of logical, thinking to demonstrate its doctrine as being either Christian or scientific. So far as Christianity is concerned, we believe it is admitted by the sect that their "bible"—to wit, Mrs. Eddy's book, "Science and Health," sold at prices varying from 12s. 6d. to 25s.—is not permitted to be translated into foreign languages. In other

words, a large proportion of the inhabitants of the world—assuming that such a limitation exists—are deprived of the opportunity of becoming acquainted with the doctrines of a creed which believes the book in question to be essential to the present welfare, if not to the future salvation of mankind individually. That sort of selfishness certainly does not coincide with the spirit of universal charity and goodwill to all men that forms one of the most attractive features of christianity. Not only were the early Christians instructed to sell all they had and give to the poor, but they were taught that to preach the gospel was a first duty. There is hardly any more remarkable fact in human history than the way in which christian doctrines and christian literature have reached every clime under the sun. We are not for the present concerned with the truth or otherwise of the doctrines of christianity, but we claim the right to ask on what grounds any particular sect should assume a title that has become sacred to a great portion of the world. So far as we can gauge the question, the assumption of the name "Christian" by Mrs. Eddy and her followers is indefensible, if only because of the high price and limitation of the literature setting forth the tenets of their creed. Indeed, there appears to be no essential difference between this mis-called science and any other form of false medical practice worked on any ordinary money-making basis. Like the proprietors of any familiar "cure all" nostrum, Mrs. Eddy and her followers profess to cure all human diseases by some mystic process compounded of prayer and faith, applied with some sort of anointing or laying-on of hands, or other rites that, in our opinion, amount to little short of blasphemy. In one case that came before the law courts a few months ago an army officer was allowed to die of an abscess, from which under ordinary medical treatment he would, humanly speaking, have certainly recovered. The moral responsibility for that death, as for all deaths occurring under analogous circumstances, we regard as resting with the administrators of the pseudo-science that has been substituted for orthodox medical treatment. In its essence, Christian Science is simply a form of irregular and therefore illegitimate, medical practice. Those who practise it are paid fees for their services, but in the anomalous state of the British law as regards quack practice, it is difficult to suppress, or even to check, its grotesque rites. From the commercial point of view, there seems to be as much money in this as in other forms of false medical practice. At a recent trial, it was stated that Mrs. Eddy's fortune amounted to some £250,000, of which £200,000 had been given to one charitable institution alone. Unfortunately, the precise sum and nature of the organisation concerned is not known to us, but it would be interesting to learn what form of practical charity coincides with the donor's particular views. Nor is the so-called science of the sect any sounder than its Christianity. All accidents and diseases come under the scope of orthodox medical science, which endeavours to place sufferers from any bodily abnormality under conditions that will restore them, as far as possible, to a normal condition. Mrs. Eddy and her followers however, grasping the bull by the horns,

boldly eliminate surgical conditions, as, for instance, a broken leg, from their field of labour, and reserve to themselves the infinitely more difficult and intricate problems of pure medicine. Needless to say, the chances of recovery of persons suffering from serious but curable complaints, who do not receive skilled medical treatment, are thereby immeasurably reduced. We have spoken out on this matter, as we regard the pretensions of Christian Science as a standing menace to the welfare of society. A few police prosecutions would do much to open the eyes of the people as to the real nature of the cult, and would help to protect persons whose intellectual equipment is not sufficiently strong to enable them to judge aright when faced with the wiles of specious, but wholly foolish and dangerous charlatanism, parading under a thin guise of morality.

#### LUNACY LAW REFORM.

THE Report of the Commissioners in Lunacy for the year, just issued, constitutes the sixty-third of the series presented to the Lord Chancellor. Apart from the usual features of interest and the informing statistical tables, the special feature of this report consists in certain criticisms and suggestions made by the Commissioners on the Report of the Royal Commission on the Feeble-Minded. To adopt, even if it were well to adopt, the recommendations of that Commission *in globo* would entail the passage of a considerable Bill through Parliament, and one which would deservedly give rise to much discussion. In the present state of legislative congestion, such a measure will, we fear, have to wait a considerable time before it sees the light, or, at least, before it has any chance of passing, even under the reformed procedure now adopted. It is a significant comment on our parliamentary system that these pressing matters of social reform should excite so little practical energy and enthusiasm in the breasts of the people, that their parliamentary representatives prefer to waste hours and weeks of precious time by blocking and obstructing, by what are regarded as "legitimate" methods, measures which they object to, but which are destined to pass by the mere weight of a Government majority, if by nothing else, to the exclusion of so many questions tending to the higher civilisation of the country. Foreseeing the unlikelihood of a big and comprehensive scheme passing for some time yet, the Commissioners recommend that some of the more serious anomalies of the present position should be dealt with by short amendments to the existing Acts. The first important matter they would like to see dealt with is the segregation or restraint of some classes of the feeble-minded. Defective women and girls need special care, so that they may be prevented from becoming mothers. To those who have the real interests of the community, present and future, at heart, surely there can be nothing which should evoke more general interest and sympathy. The cruelty to these wretched creatures involved in their violation by unheeding men and boys, and the still greater barbarity of permitting the birth of children tainted with mental defect, should hardly require demonstration, and we need hardly say that we cordially endorse this proposal

of the Commissioners. The next matter is the restraint of the feeble-minded criminal, that is, of the feeble-minded person who turns naturally to theft as a means of sustenance, and whose whole life consists in alternations between gaol and petty crime. A step in the right direction was taken last year by the institution of the indeterminate sentence, but, like most new things, this excellent provision has not found favour with judges, and additional effective administrative means are badly needed for the benefit of the defective criminal. Reform of the Lunacy Commission itself has long been required, and the Commissioners again recommend that their number should be increased by two medical members. As they rightly point out, the legal side is well represented, and, insanity being a disease, the subjects of it need enlightened supervision and treatment of a medical character. Moreover, the study of insanity and research work into its nature and prevention can only be carried out by medical men. For our own part, we say unhesitatingly that we consider the presence of legal members on the Commission as an anachronism. At the beginning their presence was looked upon as a kind of safeguard to the personal rights of the insane, but with the change which has taken place in the whole scheme of dealing with insanity, their retention not only is very costly, but it deprives the Commission of a proportionate number of working members. As every body connected with asylums knows, the "inspection" by legal members is a solemn farce, for they know as little about institution work, administration, and insanity, as the medical members do about conveyancing. A legal adviser is needed for the Commissioners, but they themselves should all be medical men. A lingering remnant of the ineffectiveness of lunacy law is presented by the institution of the Judge and Masters in Lunacy, with the Chancery Visitors, for the management of the property of all classes of mental defectives. Here, again, is a most expensive legal staff before whom proceedings in the case of the estates of lunatics is heavy and burdensome and superfluous. Most of the insane are people of small means, and the administration is most costly. The two medical visitors should be transferred to the Commissioners' staff, and the business side put under the Public Trustee. The Commissioners recommend the former step, but, oddly enough, they suggest that the Chancery Division of the High Court should be substituted for the Judge and Masters. Surely the machinery of the Public Trustee's department is precisely what is required to deal with the estates, and the cost is trifling, generally averaging from one to two per cent. on all transactions. If the Lord Chancellor can see his way to institute these pressing reforms, he will accomplish much to distinguish his tenure of office.

#### CURRENT TOPICS.

##### The Hospital Treatment of School Children.

THE treatment of defective school children is one of vast practical importance to medical men. Unless some decisive steps are taken to prevent local authorities from sending their patients to the voluntary charities, a most unjust addition will be

made to the gratuitous work already performed by the profession concerned. Worst of all, the injury to general practitioners will be wrought through the agency of their professional brethren on the honorary staff of the hospital. The London County Council has entered into arrangements with a few of the hospitals for the treatment of a certain proportion of defective children. This action was formally disapproved by the Annual Representative Meeting of the British Medical Association. That body has not allowed the grass to grow under its feet, but has promptly circularised members of the honorary medical staffs of the metropolitan medical charities, drawing attention to its resolution, and expressing a hope that those addressed will do all in their power to prevent such an abuse of the voluntary charities. This practical step is a move in the right direction, as it tends to convert a pious resolution into a polite pressure. It remains to be seen whether the members of honorary medical staffs will venture to ignore the only authorised and collective voice of their profession that is available. The boards of hospitals are apt to treat with contempt the interests of the outside medical profession. It is to be hoped that the present action of the Association Representatives will inaugurate a new era by instituting a certain amount of control over medical charities through the medium of their honorary staffs. The success or otherwise of this most desirable consummation will depend on the loyalty of those gentlemen to their professional brethren.

#### Motor Ambulances in Towns.

THE value of motor ambulances in great modern towns is almost incalculable. The positive saving in human suffering, and, now and then, in human life, resulting from a good organisation of the kind, is more or less self-evident. Now that the use of the telephone is becoming universal in busy quarters, there need be little difficulty in summoning an ambulance. In London, curiously enough, the provision of an up-to-date system of the kind is behind that of various other large towns in various parts of the kingdom. In his evidence, last week, before a Committee of the House of Commons, Sir William Collins threw some valuable light upon the subject. Of recent years there has been an increase, according to the police returns, of the number of persons killed and injured in street accidents in the metropolis. In 1891 the figures were 5,784, but in 1905 they reached 11,850; in 1906, 14,278; and in 1907, 17,035—an increase of 62 per cent. in three years. It is a significant fact that of those injured in the London streets, no less than 60 per cent. conveyed to hospital are carried by cab or van, "often a most unsuitable and dangerous arrangement." At present it is suggested that, as in the case of the City of London proper, the call should be given by the police only, while in suburbs the public would be able to give the requisite summons. In the City, however, the police are under the control of the Corporation, whereas in greater London the control is vested in the hands of the Home Secretary.

#### Ice-Cream.

ON August 6th, at Marylebone Police Court, the hearing of a charge of permitting ice-cream to be manufactured under insanitary conditions disclosed a revolting story. The defendant occupied a shed and two rooms, one of which, where the cream was manufactured, was described as "partly water-closet, and partly dustbin," having besides in one corner an open

gully leading to a drain. A quantity of hot stuff for making the cream was found in one bed-living room in two large uncovered tins. This room was described as filthy; it was occupied by two adult females and one male during the night, and by one adult male during the day. The finished "cream," it was further stated, was retailed in the streets, and there exposed on a barrow in open pails to further contamination from an atmosphere loaded with foul dust. The magistrate expressed the hope that people reading this case would think before purchasing "ice creams" of such quality, and "save themselves from typhoid fever or something of that sort." As the customers for street-vended ice-creams are almost entirely children, it is not likely that the magistrate's suggestion will have much effect. It would be an advantage if, instead of the maximum fine of 40s., which was imposed in this case, the law would allow of a sentence of imprisonment with hard labour upon wilful offenders, whose methods are likely to be followed by widespread injury to the public health.

#### Quis Custodiet Custodes?

A LETTER in leader type in a prominent position in the *Times*, and having, besides, the intrinsic value due to literary purity, commands attention and respect, whether or not the writer withholds his name; and we cannot doubt the truth of a story published under these conditions in a recent issue of our contemporary. The writer stated that he had occasion to call in three medical men within the last few months. Two of them were practitioners eminent in England, the third a specialist famous on the Continent. Each of them made use of a clinical thermometer, taking it from its case, fingering it, inserting and leaving it in the customary way in the patient's mouth, and after withdrawing it, putting it back uncleansed into its case. This incident is one of a kind which, during a recent trial in the High Court, was characterised by the judge as a "true Molière." One can picture the pompous doctor holding forth in learned terms on the dangers of sepsis, whilst plunging into the open mouth of his awe-stricken victim a filthy instrument, the vehicle for conveyance of a dose of germs, the virulence of which the learned physician had just described. It is a bit of true comedy, looked at from one point of view, but calculated to produce a smile on the wrong side of the face of the great bulk of medical men who take their profession seriously, or, perhaps, even too seriously.

#### Sick and Wounded Territorials.

THE Secretary of the War Office has within the past few days issued to the Territorial County Associations throughout the country a "scheme for the organisation of voluntary aid in time of invasion." The scheme is the outcome of a conference of the Army Council with the British Red Cross Society and the chairmen of certain county associations. The scheme develops fully the suggestions put forth in the Circular Memorandum issued in May last year, upon which we commented at the time, and sets out in explicit terms, and with precise instructions, matters with which, since the subject is a new one, the public is not familiar. It is hoped that county associations will place themselves in communication with the Red Cross Society, with a view to initiating the formation of voluntary aid detachments, if it is not the wish of the associations themselves to undertake their formation and training. The scheme is avowedly modelled upon those existing in Germany and

Japan. It is stated that the medical organisation of the Territorials is sufficiently complete to meet the immediate requirements of the troops on the march and in action, but lacks several of the parts provided for in all home defence armies. The requirements most urgently called for are: 1st, Trained corps for organisations connecting field ambulances with railway lines ("clearing hospitals"); 2nd, trained corps organised for rest stations or temporary hospitals; 3rd, trained corps for the expansion of general hospitals; and, finally, there is to be considered the choosing of the necessary hospitals. In order to provide a *personnel* for all the duties described, it is suggested that "voluntary aid detachments" of the British Red Cross should be organised in each county. The detachments would consist of both men and women, to the women being, of course, allotted the work of nursing and of preparing food. The aim will be to enable local detachments to make use of local resources for improvising accommodation and transport of wounded, and for providing for them temporary care and treatment until they reach the general hospitals. The scheme is thoroughly practical; to take part in it will bring a new interest into many incompletely occupied lives, and it need not be doubted that the patriotic spirit which has so successfully established the Territorial Forces will win success for this necessary part of its organisation.

#### Hop Substitutes in Beer.

THE subject of beer-brewing, and the materials used in the process, is ably dealt with in the recently-issued quarterly Report of the Kent county analyst, Dr. M. A. Adams. Dr. Adams expresses the opinion that there is nothing prejudicial, or even unreasonable, in the use of certain malt substitutes, but does not consider the case of hops as quite the same. He declares that hops flavour the beer as no others substance can flavour it, and by their action upon certain of the albuminoid materials of malt they act as preservatives. There are many agents, like quassia, for instance, that can impart bitterness, but it is not the wholesome bitterness of the hop. Dr. Adams utters a vigorous protest against the use of antiseptics like salicylic acid for preventing the beer from going bad. This acid is a potent drug that should be employed only by the physician as a remedy in certain maladies; it has no rightful place as an "article of diet." The Kent County Council have adopted Dr. Adams' suggestion that it should be made an offence under the Food and Drugs Act to use any substance other than hops for the bittering of beer, or any chemical substance such as salicylic acid as a preservative, and the Council have resolved to communicate with the Government on the subject. In the meantime, until new legislation is passed—probably a remote contingency in the present state of parliamentary business, all the ingenious manufacturers able profitably to turn out beer containing little malt and no hops will no doubt make the most of their opportunities. If the liquor be palatable, and taken in moderate quantity only, it may not, at any rate, prove more injurious to health than the genuine article; and with this feeble consolation we must, for the present, be satisfied.

#### PERSONAL.

We understand officially that H.M. the King has been pleased to give effect to the representations of the General Council of Medical Education and Registra-

tion that it is expedient to confer on the registered practitioners resident in England and Wales the power of returning an additional member to the General Council. This addition, however, will not be made until the next ensuing general election of direct representatives.

AN interesting announcement in connection with the new "Red Cross" organisation is that Princess Christian has accepted the presidency of the Berks County Section of the new Territorial branch of the St. John Ambulance Association. Under the scheme recently published by the War Office and the British Red Cross Society, every candidate for the voluntary aid detachments must be in possession of the St. John Ambulance first aid and nursing certificates.

THE Commissioner of Police has appointed Dr. F. E. Cane a divisional surgeon to the police of Edmonton district in succession to Dr. W. Jones.

DR. DOUGLAS ARGYLL ROBERTSON, Hon. Surgeon Oculist to His Majesty the King in Scotland, Consulting Ophthalmic Surgeon, Edinburgh Royal Infirmary, left estate valued at £30,002.

DR. W. BEVAN LEWIS, Medical Superintendent and Director of the West Riding Asylum, Professor of Mental Diseases in Leeds University, has been elected President of the Medico-Psychological Association of Great Britain and Ireland.

DR. W. GIBSON, J.P., has been appointed, under the Marine Department of the Board of Trade, Sanitary Surveyor and Medical Inspector of Emigrant Ships at Belfast, a post held by Professor Sinclair until the beginning of the present month.

DR. ANDREW JAMES DUNCAN, of Nethergate House, Dundee, Consulting Physician and Ophthalmic Surgeon to the Dundee Royal Infirmary, who died on July 7th, aged 66, left personal estate in the United Kingdom valued at £23,612.

MEMBERS of the General Medical Council and others who have attended its sittings, will learn with regret of the death, at the age of fifty years, of Mr. Sydney Lushington, barrister and standing counsel to that august body.

AT the Cheltenham Liberal Club, Dr. Richard Davies, one of the representatives of the North Ward on the Town Council, was presented with a motor-car and illuminated address from sympathisers and constituents and fellow-townsmen grateful for his past services.

THE DUKE OF DEVONSHIRE will preside at the Poor-law Conference for the counties of Derby, Leicester, Lincoln, Nottingham, and Rutland, at the Town Hall, Buxton, on October 21 and 22. Papers will be read on the Report of the Royal Commission on the Poor-laws in relation to rural unions, the proposed abolition of boards of guardians, and district nursing of the aged and destitute.

THE Management Committee of the Glasgow and District Branch of the National Association for the Prevention of Consumption have unanimously appointed Dr. James W. Allan, Glasgow, a former Superintendent of Belvidere Hospital, Glasgow, to the position of Resident Physician at the Sanatorium, in lieu of Dr. Beaumont Percival, who had accepted an appointment abroad.

THE late Dr. Rayner Batten, of Gloucester, has left estate of the value of £46,973, and Dr. E. Wearne Clarke, of Chesterfield, £7,261. The latter bequeathed the ultimate residue of his property to the Senatus of the University of Edinburgh, upon trust to found and endow a bursary to be called the "Wearne Clarke" bursary, "in honour of my University and for the help of some others that come after me in my profession."

# A CLINICAL LECTURE

ON

## FEEBLE-MINDED CHILDREN. (a)

By A. F. TREDGOLD, L.R.C.P.Lond., M.R.C.S.Eng.,

Medical Expert to the Royal Commission on the Feeble-Minded; Consulting Physician to the National Association for the Feeble-Minded, &c., &c.

### PART I.

GENTLEMEN,—As you are all aware, children differ enormously in their mental capacity. On the one hand, there are those who are so far ahead of the average that they astound us with their precocity, and there are probably no branches of science or art which have not possessed their infant prodigies. At the other extreme we see idiotic children who are so deeply deficient in mental capacity that they may almost be described as mindless. There is, of course, no difficulty in recognising that the condition of these latter is abnormal and pathological, but, in view of the fact that they are apparently connected by means of a regular series of gradations with those of precocious development, it becomes by no means an easy matter to say where this pathological change begins and where the physiological condition ends. Consequently, our first task must be to define what we mean by the feeble mind, and to do this it is necessary that we should have a definition of the normal mind.

Now, mind is exceedingly complex, and the mental capacity even of those whom we have no difficulty in recognising as normal varies within very wide limits. Since, however, the only manifestations of mind are movements or inhibition of movements, it is upon the nature of these that we must depend for our definition, and in particular it is upon the character and extent of those movements by which an individual conforms to his social environment—that is, upon his conduct and general behaviour—that we must form our judgment as to the health or disease, the normality or abnormality, of his mind.

Using this criterion, I have ventured to define the normal mind as “a degree of mental capacity sufficient to enable its possessor to perform his duties as a member of society in that position of life to which he is born.” This standard we must look upon as the irreducible minimum, and any falling short of it must be considered as abnormal and pathological.

Now there are three main conditions—three forms of disease of mind—which fall within the category of the pathological. These are insanity, dementia, and amentia or mental deficiency. Accepting the axiom that the neurones of the brain constitute the anatomical basis of mind, we may regard insanity as the result of a perverted function of those neurones, dementia as being caused by their decay, and amentia, or mental deficiency, as the clinical expression of their imperfect or arrested development. To make use of a homely simile, we may say that the ament is a person who has never possessed a mental banking account; the lunatic is one who is in temporary difficulties; whilst the dement is in a state of inextricable bankruptcy. It is, of course, with the mentally defective only that I am concerned to-day; but I mention these facts because it is very desirable that we should have a clear conception of the relationship of this to the other forms of mental disease.

But, just as normal minds vary very greatly in their capacity, so do minds which are defective, and the order of amentia ranges between persons who, on the one hand, are but little removed from the normal, to, on the other, the most profound idiots. Since these two extremes are connected by insensible gradations, any differentiation must be looked upon as an arbitrary one; but for convenience of description and administration, we may divide the mentally defective into three classes.

The lowest class consists of individuals so defective

as to be lacking in the power of self-preservation. This degree is termed idiocy, and the idiot is defined as “a person so deeply defective in mind from birth or from an early age that he is unable to guard himself against common physical dangers.”

In the next degree, known as imbecility, this power of self-preservation is present, but there is no capacity for systematic or sustained work; accordingly, the imbecile is defined as “one who, by reason of mental defect existing from birth, or from an early age, is incapable of earning his own living, but is capable of guarding himself against common physical dangers.”

Lastly, in the third or mildest degree of mental defect, we have a capacity so far in advance of the others that not only may certain kinds of work be undertaken, but, under proper supervision, the individual may actually pay for his keep, although he can never compete on equal terms with his normal fellows, nor can he lay out the money he earns or manage his affairs with the ordinary prudence of a normal person.

Literally, the term feeble-minded is applicable to each and all of these degrees, and in America it has this general significance. For some time, however, it has been customary in this country to restrict it to the mildest degree, and it is to this latter class that it is now usually applied.

The feeble-minded, then, are persons (children or adults) who suffer from the mildest degree of mental deficiency, and although some of the least defective members of the class seem to approach very closely to the normal, it is necessary to remember that they are really morbid and pathological specimens, and separated from even the least intellectually gifted of the normal by a great and impassable gulf. That this is so is shown by their absolute incurability, and by the fact that they possess similar ætiological and anatomical features to the idiots and imbeciles. In fact, mental deficiency is not a mere subtraction in varying degree from the normal, but stands on an entirely different footing.

I do not propose to weary you with any detailed account of the anatomy of these feeble-minded children; but there are some points, not devoid even of general interest, which I must place before you. What the precise relationship is between mind and brain we do not know, and metaphysical speculation on this matter would take us too far away from our subject; but this much is clear, and generally accepted, that in some way or other the brain is the organ of mind. Consequently, we should expect the defective mind to be accompanied by a defective brain.

In idiots and imbeciles the whole brain is usually small, and presents readily recognisable anomalies of form and consistence. Occasionally it is larger, but I do not think I have ever seen the brain of a person suffering from severe mental defect which did not present some marked pathological condition or anomaly of development which at once distinguished it from that of a normal person. In cases suffering from the mildest degree of deficiency—namely, feeble-mindedness—these naked eye changes may not be so obvious, and such a brain may appear to be quite normal. It is here, however, that we are helped by the microscope.

In recent years a considerable amount of work has been done in the microscopical examination of the defective brain, and, speaking generally, three main conclusions have been arrived at. Firstly, the defective mind is accompanied by a defective development of the cortical neurones. Secondly, this imperfect development is most marked in certain regions of

(a) Delivered at the Medical Graduates' College, July 7th, 1909.

the brain. And, thirdly, the amount of change discoverable under the microscope is, as a rule, directly proportionate to the degree of deficiency observed during life. As you are aware, the brain of a newborn child consists of a gelatinoid substance in which are embedded myriads of embryonic ganglion cells or neuroblasts. In the course of time these neuroblasts undergo structural development, and they finally compose the definite cortical layers, the cells of which differ in structure according to their particular function. If the brain of a normal person of mature age be examined, a few undeveloped neuroblasts may still be found amongst the fully developed cortical cells, showing that, even in regard to the highest type of cell which has yet been evolved, Nature still provides lavishly, and in excess of any ordinary demands. Another explanation, which I throw out to the pedagogue, is that these undeveloped neuroblasts in the normal brain may be the consequence of the inadequacy of our present educational methods.

In the defective brain, on the other hand, we still see apparently healthy, fully-developed cells, as well as incompletely developed neuroblasts, but, instead of the former being in the majority and the neuroblasts being few and far between, these conditions are reversed, and we find a comparative paucity of healthy cells and an abundance of imperfectly developed neuroblasts. Moreover, the total number of cortical cells is smaller, and, instead of being arranged in an orderly manner, they are often extremely irregular and haphazard in their arrangement; instead of their apices pointing uniformly upwards, it is quite common to find the cells sideways, or even upside-down.

Such incompletely developed cells are to be found in practically all the cell layers and regions of the cortex; they are, however, most marked in the layers of the medium and small pyramids, and they occur in much greater number in the prefrontal and parietal lobes of the brain. This fact is particularly interesting because it has been found that it is these same layers of cells and fibres, and the same regions of the brain, which are normally the latest to develop and which show the earliest and greatest change in dementia. So that there is good reason for thinking that in the cells of these layers and regions we see the anatomical basis of the highest processes of mind.

We see, then, that in the mentally deficient there is some cause at work interfering with the proliferation and development of the cortical cells of the brain, for these cells are both fewer in number and imperfectly developed. The next question is: What is this cause?

In the course of its development the brain is subject to the action of two forces, intrinsic and extrinsic, in other words, heredity and environment. Ancestral tendencies, acting upon the germinal plasma in a manner we do not yet understand, urge forward the embryonic rudiment along certain lines. The environment, according as it is favourable or the reverse, assists or modifies this developmental march. It cannot be doubted that the environment does have a very considerable effect upon all forms of life which are undergoing rapid growth. We see this in plants, in animals, and in the offspring of man. As physicians, we see daily many examples of the effects of a pernicious environment (using this term to include all external influences, such as food, warmth, air, etc.) in bringing about defective stature, weak and flabby muscles, delicate chests, and many other conditions of imperfect nutrition. Further, we see a similar effect upon the brain, and such cases as Kaspar Hauser, Laura Bridgman, and many others amply demonstrate that cortical development may be interfered with by deprivation of the stimuli which are necessary to it. But these cases are rare, and it is a remarkable fact that although adverse conditions exercise a potent influence upon bodily development, their effect upon cerebral growth seems to be comparatively slight. Apart from accident or definite disease of the brain, to which we shall allude presently, the small number of cases of mental defect which result from external influences are nearly always a consequence, not of deprivation of food and pure air, or other pernicious factors which make up slum life, but of the deprivation of sensory stimuli. The child of the slum,

although often enough of wretched bodily physique, is usually immeasurably superior as regards his mental capacity to the lusty offspring of the agricultural labourer. It is my opinion, therefore, that amongst all the factors of the environment which encourage cortical development, impressions of sight, sound and touch play by far the most important part.

At the same time it cannot be denied that some of those other factors to which I have alluded have an influence in retarding development. Many ill-nourished children are not only dwarfed in their bodies, but also in their minds. The resulting condition, however, is not feeble-mindedness, but simply intellectual dulness. It disappears when the adverse environment is removed, whereas real mental defect is incurable. I have thought it well to refer to this because some people, even some medical men, are apt to think that the environment is an important factor in producing feeble-mindedness. In my opinion this is a fallacy. I have never seen a case of idiocy or imbecility so caused, and very rarely a doubtful case of feeble-mindedness. Many of the so-called defective children attending special schools who are instanced as examples due to faulty environment are not defective at all, but merely dull and backward. A certain proportion of cases, probably about 10 per cent., are, it is true, due to external factors, but these act by bringing about hæmorrhage, inflammation, or some definite disease of the brain whereby the further growth of the cortical cells is arrested. These we shall consider subsequently.

In the great majority of cases of feeble-mindedness it is not the soil, but the seed, which is at fault. The cortical cells fail to attain full development because the germinal plasma is defective from the very beginning. And this inherent defect is due to morbid heredity. I have made careful inquiries into the antecedents of several hundreds of persons suffering from mental defect, and I find that there are three conditions which are so common to these cases that it is impossible for us to look upon the connection as an accidental one. These are:—(1) Antecedent mental defect, insanity, epilepsy, or other serious anomaly of the nervous system; (2) Tuberculosis, and (3) Alcoholism. I do not deny that such conditions may and do occur in the genealogical tree of individuals who are perfectly healthy in body and mind, but in these cases of mental defect it is not a single insane, consumptive, or alcoholic ancestor that we find, but a marked family tendency to one or other of these conditions. To give actual figures, I may say that in my own series of cases of amentia, which embraced the severe as well as the mild grades, over 80 per cent. of the sufferers were the descendants of a pronounced neuropathic stock; 46.5 per cent. showed a family history of marked alcoholism; and 34 per cent. of tuberculosis. There are, of course, other antecedent factors concerned in the production of amentia, for it is a condition the cause of which is rarely single, but I believe these three to be the chief.

I will not attempt here to describe the manner in which these ancestral defects act, but, in view of all the facts, I can come to no other conclusion than that in some way the germinal plasma has been so devitalised by such marked hereditary conditions that it is incapable of normal and perfect development, and the effect is naturally seen in the most complicated, most unstable, and latest acquired tissue—namely, that concerned with mind.

Now, the pronounced grades of defect—that is, idiocy and imbecility—have been known from time immemorial, and they are legally recognised in all civilised countries. Persons suffering from the milder degree of feeble-mindedness have also for long been known as "not-all-there," "not exactly," or by some similar euphemistic term. In this country, however, the legal recognition of this class dates from comparatively recently, and even now, whilst providing for the feeble-minded child, we ignore the feeble-minded adult. The legal cognisance of the feeble-minded child arose in this way. Soon after the passing of the Act which made elementary education compulsory, it began to be noticed that a class of children were attending elementary schools who, although not



imbeciles, were yet so defective in mind as to be incapable of profiting by the ordinary methods of instruction. Inquiries were made by various medical men, scientific and philanthropic societies, and finally a Departmental Committee was appointed. This led, in the year 1899, to the passing of an Act which clearly defined the mental status of these children, and which permitted the local education authorities to provide special facilities for their training.

In the words of this Act, these children are defined as those who, "not being imbecile, and not being merely dull and backward, are defective, that is to say, by reason of mental defect are incapable of receiving proper benefit from the instruction in the ordinary public elementary schools."

From this date, therefore, feeble-minded children acquired a definite legal recognition and became the subjects of interest and importance, not only to the pedagogue, but also to the medical practitioner, upon whom was placed the duty of certification. And it is likely, in view of the recent Report of the Royal Commission, that the next few years will see further legislation regarding this class, whereby the duties and responsibilities of medical men will be considerably increased.

The number of these children varies somewhat in different localities, owing to causes into which I will not enter. On the whole, however, they compose about 8 per 1,000 of the school population of the country, and I estimate that in England and Wales their total number is over 50,000.

Mentally deficient children are divisible into two groups, which have usually been termed "congenital" and "acquired." The term congenital is applied to those cases in which the defect dates from before birth, acquired to those dating from after birth. In my opinion, however, it is unscientific to make use of the period of emergence of the child into the world as a means of differentiating these cases, for an inborn defect may not be revealed until the early years of childhood, whilst an acquired defect may be acquired whilst the child is yet unborn. For these reasons I have proposed to discontinue the use of these terms entirely, and since the real difference is dependent upon whether the defect is the result of a morbid condition of the germinal plasma, or is due to an adverse environment, I have suggested instead the terms "primary" and "secondary." By primary mental deficiency I mean a defect which is due to inherent imperfection of the germinal plasma of such a nature that perfect mental development is impossible. By secondary mental deficiency I mean a condition of arrested mental development, the result of some extraneous factor acting after the fertilisation of the ovum.

It is true that in a few cases this distinction cannot be made, for there are some cases in which both inherent defects and extraneous influences are at work; but, on the whole, most cases can be referred to one or other of these groups without much difficulty, and since primary and secondary cases differ not only in their ætiology, but also in their clinical appearances, such a classification is extremely convenient, as well as scientifically sound.

(To be concluded in our next.)

**NOTE.**—A Clinical Lecture by a well-known teacher appears in each number of this journal. The lecture for next week will be by A. F. Tredgold, L.R.C.P.Lond., M.R.C.S.Eng., Medical Expert to the Royal Commission on the Feeble-Minded; Consulting Physician to the National Association for the Feeble-Minded, &c., &c. Subject: "Feeble-Minded Children" (Part II.).

It has been decided to proceed with the building of an extension to the Acton Cottage Hospital. The designs provide for a new children's ward, new operating room, new out-patients' ward, and committee room, and a new wing for accommodating the nurses. Mr. Alfred and Mr. Leopold Rothschild have given £400 towards the cost of the scheme, and £100 has been given anonymously.

## ORIGINAL PAPERS.

### THE TREATMENT OF SEVERE CASES OF CHRONIC COLITIS.

By J. P. LOCKHART MUMMERY, M.B., B.C.,  
F.R.C.S.,

Hon. Surgeon to King Edward VII. Hospital for Officers; Senior Assistant Surgeon to St. Mark's Hospital for Diseases of the Rectum.

CASES of chronic colitis naturally divide themselves into two distinct classes: (1) Those cases which, if carefully treated by suitable dietary, proper regulation of the bowels, and one or more visits to some suitable spa where proper lavage of the bowel can be carried out, quickly get well, and remain well; and (2), cases in which, in spite of prolonged and careful medical and spa treatment, little, if any, improvement occurs, or the improvement is only temporary, the patient quickly relapsing, and the symptoms, in spite of continued treatment, getting worse. I think everyone who has had any experience in the treatment of chronic colitis will admit that this second type of case not only exists, but forms an unpleasantly large proportion of the whole.

The worst cases of this second class spend their time going from one doctor to another, and in visiting most of the English and Continental spas. Many of them go in for Christian Science, vegetarianism, and other forms of quackery. In fact, they form one of the worst classes of chronic invalids, a nuisance to their doctors, their relatives and themselves. It naturally occurs to one to ask what is the reason that the treatment which seems so effectual in the first type fails so signally in the second? The reason for this is, I think, not far to seek. Chronic colitis is a condition usually diagnosed from the symptoms alone, and I think we shall all admit that the treatment of a disease which is only manifest by its symptoms is always difficult, and owing to the large possibilities of error which must be present in any diagnosis founded only upon symptoms, often unsatisfactory.

During the last few years I have seen a considerable number of the more severe cases of chronic colitis, both in hospital and in private. Most of these cases had previously been treated medically for long periods, and many had also been to spas and had Plombières treatment. For the most part they belonged to the second class of cases that I have mentioned, and medical treatment had failed to give them any permanent relief. All the cases that I have seen have been examined with the sigmoidoscope, and in many an operation has been performed which has enabled me to directly examine the colon and so to ascertain the exact nature of the pathological lesion. I have no hesitation in saying that all cases presenting symptoms of chronic colitis should be most carefully examined with a view to ascertaining the exact nature of the lesion in the colon.

The chief reason for the unsatisfactory results that are often seen in cases of chronic colitis is that the symptoms ascribed to this disease may result from a great many different conditions of widely different characters, and the treatment which is suitable for one case is not suited to others. Our aim should be in all such cases to find out, if possible, the real cause of the symptoms. This is admittedly not always possible, but, on the other hand, it often is.

In a paper read before the Royal Medico-Chirurgical Society, in June, 1907, I first pointed out that in the great majority of cases of chronic colitis a lesion, or lesions, could by suitable means be demonstrated in the colon, that these lesions varied considerably in different cases, and that any treat-

ment which did not take into account the cause of the symptoms is unsound in principle.

The name chronic colitis should be reserved for those cases in which there is a chronic inflammatory condition of the mucous membrane of the colon. These cases can be readily distinguished by examination with the sigmoidoscope, as the sigmoid flexure is practically always involved.

The cases in which there is a definite inflammatory condition of the mucosa, as seen on sigmoidoscope examination, are those which are suitable for treatment by lavage and Plombière's douche. Many of them, in my experience, do well. They form the first class of which I have spoken, and the majority of all cases. On the other hand, there are many cases with identical symptoms in which, on examination with the sigmoidoscope, we find the mucous membrane quite normal, but some other lesion is present. It is this class of case which I propose to consider in detail. In many of these cases there is no inflammation of the mucosa of the bowel, while in others in which there is it is purely secondary to some other lesion. The nature of the lesion varies considerably. An important class is that in which some chronic obstructive lesion exists in the colon, such as adhesions from previous peritonitis or perimetritis. Or a kink or acute angle is present in the pelvic colon as the result of adhesions to the iliac fossa, or in the meso-sigmoid, probably due to old chronic constipation. Another form of lesion is that in which there is a partial volvulus of the sigmoid, or a chronic and recurring intussusception.

We must also bear in mind that cancer of the colon may cause symptoms of chronic colitis, which are indistinguishable from those occurring in the simpler forms. I have seen seven such cases, in several of which the patient had previously undergone treatment for months for a supposed simple chronic colitis.

In another well-marked group of cases we find a chronically inflamed appendix, which, owing to the fact that it has not caused the usual distinctive symptoms, has remained undetected. There is certainly no doubt that a chronically-inflamed appendix may cause symptoms of chronic colitis, though exactly how it does so is not always clear. In some it is due to adhesions which have formed to the pelvic colon, while in others it probably produces symptoms by the constant discharge of septic material into the bowel, in the same way that carious and septic teeth will cause gastric disease.

There is one well-marked group of cases in which all the symptoms of a severe chronic mucous colitis exist, and in which there is no inflammation of the mucosa, but the whole colon is found to be lax and atonic. On examination with the sigmoidoscope, the bowel is seen to be unduly lax, and to have a marked tendency for the upper portions to prolapse into the lower; the walls are thin and semi-transparent; the lumen is dilated, and the normal sacculations much exaggerated. There is generally well-marked ptosis of the transverse colon and of the stomach. In several instances in which I have operated for this condition the centre of the transverse colon has been found in the bottom of the pelvis, lying in front of the upper part of the rectum.

In this type of case the colon is dilated and its walls atonic, but there is no inflammation of the mucosa. It is obvious that it is most important to be able to distinguish this type of case, as treatment by lavage, which involves distension of the already dilated colon, will not only be useless, but will do harm. Such cases are not suitable for Plombière's treatment. It is quite obvious that

these different conditions, although they cause the same symptoms, cannot be classed as one disease.

I cannot believe that the neurotic element, which is so commonly present and about which we hear so much, is other than secondary. I have frequently seen it entirely disappear after the cause of the symptoms has been removed.

One of the chief reasons for the unsatisfactory results that have been obtained in the treatment of many cases of colitis has been inaccurate diagnosis, and treating as a disease what is only a symptom.

The indications for operating in cases of chronic colitis will, of course, depend upon the nature of the lesion present. When there is any evidence of an obstructive lesion, such as adhesions or chronic volvulus, laparotomy is clearly indicated, and affords the only possible method of adequately dealing with the case.

The following is a good instance of the type of case which can only be treated satisfactorily by operation. The patient, a married lady, was recently sent to me by her doctor. For ten years she had been a chronic invalid with mucous colitis. She suffered from a chronic pain in the abdomen, which at times became severe and was always worst on the left side. She had lost weight and always felt ill and depressed. She had fits of weeping and misery on the slightest, and often upon no provocation, and was unable to go about or enjoy life in the ordinary way. She had an earthy complexion, and her appearance when I saw her was typical of toxæmia or auto-intoxication. Her stools contained large quantities of mucus, and often consisted of little else. A curious and unusual symptom was that the presence of anything in the rectum caused an uncontrollable desire to go to stool and much tenesmus. She had been under medical treatment for years, and all the recognised forms of medical treatment had been tried. On examining the bowel with the sigmoidoscope, I found the mucosa quite normal in appearance. In the middle of the sigmoid, however, the bowel was found to be firmly fixed and angulated, apparently by adhesions. The uterus was also found to be markedly retroflexed. It seemed probable that the tenesmus from which she suffered was due to the condition of the uterus, and a gynaecologist who saw her with me confirmed this view.

I opened the abdomen, and found a number of firm adhesions bearing down and kinking the middle of the sigmoid flexure; these were divided, and the wound left in the peritoneum sewn up. The uterus was also drawn forward and anchored to the abdominal wall so as to correct the position.

The patient made a good recovery, and all her symptoms have now completely disappeared. When I last saw her some months after the operation she had put on weight, her complexion was good, she no longer had any mucus in the stools, and she told me that she never remembered feeling so well and fit.

Though most of the cases of true colitis (that is to say, when a chronic inflammation of the mucosa of the colon is found) get well, as the result of medical treatment and lavage, there are nevertheless a certain number which either fail to get entirely well, or suffer from frequent relapses. These cases are, I believe, best treated by appendicostomy. This enables the patient to keep the colon efficiently washed out daily with the minimum of inconvenience, and the symptoms quietly clear up.

The most difficult cases to treat are perhaps those in which there is a general atony of the bowel combined with ptosis of the colon. Stitching up the

colon is quite useless, as it is unreasonable to expect any stitches to permanently hold up the stomach and transverse colon when the natural supports have not been sufficient to do so. It is impossible to directly deal with the condition, but I have had very satisfactory results in such cases from appendicostomy. The object of the operation in such cases is to prevent the stagnation of the faecal contents of the colon, which is the chief cause of trouble, and at the same time by the introduction of suitable peristaltic stimulants to improve and restore the muscular tone of the bowel wall.

The following well illustrates this type of case:—Mrs. B., æt 32, a married lady, was sent to me by her doctor, suffering from severe chronic colitis. There was a history dating back twelve years, though the symptoms had only been really severe for the last four years. She always felt ill, and had a chronic aching pain in the left side of the abdomen. She was always very constipated, and had to take large doses of aperients, and this often without success. The stools contained mucus, and often large casts several feet in length. She had been treated for long periods by the usual remedies, and had on different occasions consulted several well-known physicians, but without obtaining any relief from her symptoms.

Examination showed an atonic condition of the bowel, and the mucosa showed chronic inflammatory changes. There was also well-marked ptosis of the transverse colon. I operated, and on opening the abdomen, found the colon much dilated and thin. There was also considerable enteroptosis. Appendicostomy was performed, as the only alternative seemed to be removal of the colon. The colon was subsequently irrigated daily with warm water (at first in small quantities) to which a teaspoonful of ox-bile was added. She rapidly improved in health, and learned to wash out the bowel for herself. The mucus entirely disappeared from the stools, her health improved, and the bowels acted without any aperient being used. During the next six months she put on 2 stone in weight, and when I last heard from her about nine months after the operation she was quite well, and although, on my advice, still washing out the bowel, was quite free from any of her old symptoms.

Appendicostomy is an operation followed by excellent results in many of those cases, but it is not a panacea for all cases of so-called chronic colitis, any more than is lavage. It should only be performed in suitable cases, and that can only be done if we first ascertain the cause of the symptoms. I have seen cases in which appendicostomy has failed even to relieve the symptoms, because there was some obstruction or other lesion which had not been detected. I do not wish it to be thought that I am advocating operation in all cases where there are symptoms of chronic colitis. I think operation should only be resorted to after a careful trial has been given to medical treatment. But the important thing is to ascertain the cause of the symptoms by a careful examination, aided, whenever possible, by the use of the sigmoidoscope, as it is useless treating a case by medical measures where there is an obstructive lesion in the colon, or a chronically-inflamed and thickened appendix. And, in any case, it is not satisfactory to institute treatment without knowing the cause of the symptoms.

In order to meet an overdraft at the bank, and to prevent the Imperial Cancer Research Fund from drawing on its capital, the honorary treasurer has received from the Duke of Bedford another donation of £1,000.

## A NEW PROCEDURE FOR THE TREATMENT OF DISEASES OF THE NOSE.

By EMIL SPRENGER, M.D.,  
Of Stettin.

[SPECIALLY REPORTED FOR THIS JOURNAL.]

ANY one organ of our bodies can only remain normal and healthy when it really exercises the function prescribed for it in the animal economy. In doing so it is subject to a number of physiological irritations; to which it must react if pathological changes are not to follow.

In what then does the function of the mucous membrane of the nose consist, and to what physiological stimuli is it subjected? In this I do not consider the nose as an organ of smell, as this function does not enter into the question.

The work that has to be performed by the nasal mucous membrane consists in the following:—

1. It has to keep back the particles of dust of the atmosphere, etc.

2. It has to saturate the air inspired with as much moisture as possible; it is enabled to do this through its great vascularity and extent of surface, besides this the turbinated bones retain a portion of the moisture of the expired air to give it back to that which is being inspired.

3. It has to warm the air inspired, and Aschenbrodt and Kaiser determined by a series of experiments that the air inspired was warmed to about 30 C., the warmth of the expired air is reckoned at about 36 C., it is therefore almost that of the cavities of the body.

This is what the nasal mucous membrane has to do; in doing this it is subject to the following stimuli:—

1. To the irritation caused by the particles of air streaming through the nose. (Mechanical irritation.) Here the following has to be borne in mind: the degree of this irritation is not always identical, there are natural rest pauses, one, that which comes in between the two phases of respiration; moreover, expiration does not always begin as soon as the act of inspiration is completed. Finally, at the commencement of inspiration and at the end of expiration, there is even, if only for a short moment, a rest. There is a true streaming through the air only at the heights of both inspiration and expiration; at the commencement of inspiration there is a moment when air only passes through the choanæ into the naso-pharyngeal space, and at the end of this, when only air from outside enters the nasal passages, these three factors bring about a period of physiological rest, in which the mucous membrane can rest from its labour.

2. The atmospheric pressure on the mucous membrane is a changing one, for Donders has calculated the pressure of inspiration to be 7 to 8 mm. of water and that of expiration at 9 to 10 mm. This changing pressure is not a matter of indifference to the vessels of the nasal mucous membrane, it is a powerful stimulant. (Mechanical irritation.)

3. It is subject to the stimulus from air that is cold compared with that of the internal air passages; a rather powerful stimulation by cold is therefore in action under some conditions. (Thermic stimulation.)

4. I only point out the different chemical qualities of expired air as compared with that which is inspired. Expired air is richer in carbonic acid, it contains a little ammonia, and carburetted hydrogen. It is therefore not excluded that a chemical stimulation may not take place from the rhythmical succession of columns of air of such

different compositions. (Chemical stimulation.) As the nasal mucous membrane performs its functions therefore it is acted upon freely by mechanical, thermic and chemical stimuli.

How do these relations become changed when the nasal mucous membrane is in a pathological condition? I have first of all simple chronic catarrh in my mind, in which hypertrophies and hyperplasias have taken place. In consequence of the mucous surface being diseased a mixed nasorostral breathing comes into action, or even a purely oral breathing; but in the latter case the patient must under certain conditions, such as in eating and drinking, draw air through his nasal passages by forcible inspiration, and as well as he is able. We have not here then a period of changing work and rest, but an organ placed completely out of work and then subjected to the forced passage of air. We do not have therefore a periodical change between work and rest, but a complete period of inactivity on the part of the nose, followed by a forcible driving of air through the passages. In the latter case we do not get a lower pressure of 7 to 8 mm. of water within the nose, but one considerably greater, as the external air will not enter as easily as under normal conditions. The pressure within the nose diminished by the pathological condition exerts a powerful suction action, and leads to passive hyperæmia, and this on its part, when present during every or nearly every inspiration will lead to new hypertrophies, or make those worse that are already present. Moreover, this pressure diminished pathologically, will not be equable over the whole of the nasal interior, but be especially noticeable at the diseased parts.

By the lesser or greater out-of-work condition of the nose also, the stimulation required for the health of the nose, will be correspondingly in abeyance.

First of all the mechanical stimulation of the air inclusive of its constituent parts.

Further, the nasal mucous membrane will not receive the stimulation of the cold of the external air. As now as much cold air cannot stream in as under normal conditions, a higher temperature will rule within the nasal interior than in health. This higher temperature combined with diminished pressure will lead to arterial hyperæmia, and this associated with the venous stasis already present will make the condition distinctly worse.

As less air passes through the nose, less carbonic acid and ammonia will come in contact with it.

And thus arises a *circulus vitiosus*; if the nasal mucous membrane becomes chronically affected from any cause, the nose does not act as under normal conditions, it does not receive the physiological stimulus necessary to health, it changes still more into a condition of disease, for that reason again it does less work, etc.

If we could cut through this *circulus vitiosus* at a stroke, that is if we could make the nose perform its functions normally, and cause it to get its normal physiological stimulus, we should at once mend matters. But that we can do: a typical example is the adenoid growths of the nasopharyngeal space. When these are present the nose is acting under conditions similar to those I have described as existing with chronic catarrh; for adenoid vegetations almost always lead to chronic nasal catarrh. When therefore we remove the adenoid vegetations, and in doing so restore to the nose the possibility of a normal function with a susceptibility to normal physiological stimulation, the nasal mucous membrane is frequently unrecognisable in the course of a few days.

For the nasal mucous membrane, therefore, physiological function and physiological rest are necessary. But this is so only as regards the healthy membrane; so soon as it becomes diseased, the stimuli that are required in the normal condition, become too powerful for it, and the normal pauses for rest are no longer sufficient. If, therefore, we would bring about an improvement in the diseased part we must provide for longer pauses for rest, that is we must bring about a temporary state of rest, and for this the mechanical, thermic and chemical stimuli must be kept back as much as possible.

It was thoughts like these that kept me busy thinking for some time, and which at last led to the construction of small spongy rubber balls to be retained just within the nasal entrance, which I will describe more closely.

They are small clear yellow balls or pellets of porous india rubber, the so-called "sponge rubber," they are about 12 mm. in diameter, they are furnished with a stalk for the purposes of easy handling and cleanliness. Especially delicate individuals could make use of a specially constructed pair of forceps for insertion and removal. (a) These little balls are inserted into the lower part of the nostril and retained there for half to three-quarters of an hour several times a day. Nothing but the stalk will be visible. They are of an uncommon softness and are practically of no inconvenience to the wearer, they fill up the nostril, however, thanks to their great elasticity. I generally only let one nostril be closed, and then make the patient breathe calmly but deeply through both. If both nostrils were closed, inspiration through the diseased nostril would be made too difficult. If too difficult when only one of the balls is inserted I direct the patient to draw in the breath through the mouth.

What is experienced now after insertion of the pellets? First of all a feeling of fullness is felt in the nostril, and also one of increased warmth. Very soon, however, in two or three minutes perhaps, a feeling of great relief comes on. The feeling of dryness that is often so troublesome disappears as the increased blood supply increases the secretory action of the glands. The impulse to drive air from the back through the choanæ outwards also disappears, the nose becomes free so that it can easily be blown out. In a word, the wearing of the pellet is agreeable, as I have been assured by all that have worn them. When the pellet is removed the nostril that has carried it is free, just as after an application of a weak solution of cocaine, and agreeably moist. It can now be easily cleansed as already mentioned. This condition of relief often lasts from one to two hours; and when it passes off can easily be brought about again by the same means which are thoroughly harmless and agreeable. I have often made the observation that when a person has once worn the pellets he wishes to wear them again. If the nose is examined rhinoscopically after withdrawal of the pellets a distinct diminution of the swelling will be found with slight paleness of the mucous surface.

If the pellets are worn regularly according to directions for several months a marked improvement, or even complete recovery, from the diseased condition takes place.

How then do the pellets act? Stated shortly: through the temporary venous stasis, associated with arterial hyperæmia acting under conditions of rest on the part of the nose, that is removal of physiological stimuli.

(a) Procurable from the firm "Unitas," Scotland, Falkenhead-Strasse, also the forceps.

The chest dilates on inspiration, and the air will stream through the anterior nasal openings and choanæ, to bring that in the chest to an equilibrium, but it cannot follow so quickly, as the tortuous channels of the india rubber offer resistance; consequently, the air in the interior of the nose becomes rarefied, the rarefaction being considerably greater than the normal of 7 to 8 mm. of water. A passive hyperæmia results from this (through suction). But there is a simultaneous rise of temperature within the nose, as the colder external air can only pass through the nostril at a moderate rate of speed. The heightened temperature again leads to arterial hyperæmia, which as is well known accelerates absorption in an uncommon degree. With this all the mechanical, thermic chemical irritants disappear, in consequence of the obstruction caused by the wearing of the pellets.

In what then lies the difference between the condition brought about by the pellets and that of chronic catarrh? First of all in one important particular. In chronic catarrh the condition is permanent, whilst from the pellets a changed condition is brought about from time to time only. By the congestive treatment, the diseased organ or the inflamed part is only subjected to venous stasis and arterial hyperæmia at intervals. Besides the conditions differ in other important details:—

1. By insertion of the pellets a heightened temperature is brought about in the interior of the nose, as they close the interior from the outer world fairly well, whilst in chronic catarrh there is free and open communication; the raised temperature, as is known, leads to the arterial hyperæmia.

2. The pellets act as a filter, and keep back those constituents of the air that often act as irritants. In chronic catarrh on the other hand, they often get into the nose even if in diminished quantities.

3. There is also a difference in the hindrance to respiration being at the entrance to the nasal passages and not in the interior of the nose, as in chronic catarrh. When the pellets are inserted there is everywhere within the nose an equally diminished pressure, and an equally distributed warmth, whilst in chronic catarrh the pressure is not equable and the heat is not equably distributed.

In what diseases can the pellets be made use of with advantage?

1. In simple chronic catarrh, especially in those forms that are accompanied by dryness, which is shown by the glistening look of the mucous membrane as viewed through the nasal speculum. But the pellets give relief also in cases in which there are polypi, making the passage free for the moment, although, of course, they have no permanent influence on the growth. They are very useful finally, in the cases in which there is an abnormal tendency to engorgement of the erectile tissues. For those severe cases with a good deal of hyperplasia surgical treatment or caustic must be resorted to.

2. In chronic catarrh of the naso-pharyngeal space. Here the action is in no need of explanation. Here the posterior wall of the fauces has to stand the whole of the inroad of the particles of air and dust; a period of rest can only be of advantage in recovery from the condition.

3. In ozæna. Here the good effect can be explained by the increased blood supply bringing about better nourishment of the atrophied mucous membrane; the increased glandular activity moreover plays a part, the scabs fall off readily, an effect similar to that from applying tampons of

lint (Gottstein's tamponade) is produced, the use of the pellets is also more simple, more agreeable, and the action is more certain, as patients are not always successful in applying the tampon over the parts most in need of them. When tampons are made use of it is only in a few spots that an increased secretion is excited, and those not always the worst, whilst with the pellets an increase of secretion is set up over the whole surface. Finally, the pellets act in such a way that the widened interior of the nose is corrected by the artificial narrowing of the nasal orifice; it is the same idea that led to the injection of paraffin under the mucous membrane. In quite a large number of cases of ozæna, I have been satisfied that striking improvement has taken place after the use of the pellets. The improvement makes itself known subjectively by the patient getting rid of the scabs more easily, by the nasal interior being almost always free from them, and by the lessened fluid discharge. When the pellets are used patients at any rate feel better than after any other kind of treatment.

4. The pellets are eminently suited for employment for after treatment after surgical operations on the nose. For one thing the scabs fall away more easily, and it is also of value to bring the nose under better conditions as regards nourishment after operations, otherwise one is never certain about recurrences.

5. In hay fever I have no experience of my own in regard to treatment by the pellets. Theoretically their use would come into question, firstly on account of their filtering property; there is ample provision for keeping the excitors of hay fever back in the narrow meshes of the spongy rubber. On the other hand it is conceivable that if the pellets were worn in the free intervals, such a change would take place in the mucous membrane, that at the time of an attack it would be in a position to resist the influence of the poison.

6. They might prevent the so extraordinarily frequent sucking in of the alæ nasi, as by their elasticity they would prevent their clinging to the septum. In such a case a wider meshed india-rubber would have to be used, so that sufficient air could enter. The pellets would then enter into rivalry with the rubber ovals of Schmidthuisen, the wireloops of Feldbausch, and the lint and boracic ointment pellets of Heermann.

7. Whether they will prove a substitute for the suction mask of Kuhn the future will have to show. The fundamental thought is the same: more difficult nasal inspiration with freer oral expiration. It is possible that they may be used with advantage in the diseases mentioned by Kuhn (pulmonary tuberculosis, asthma, etc.) vide Dr. Ernst Kuhn, *Deutsche med. Wochens.*, 1906, No. 37, and *Münch. med. Wochens.*, 1907, No. 16.

8. Finally, the pellets may be used with advantage when working in a dust-laden atmosphere; by reason of their filtering property they cannot fail to be of value.

The range of possible employment of the pellets is, therefore, very great, and as they are perfectly harmless, and agreeable to wear, they are in my opinion well worthy of a trial.

## SLEEPING SICKNESS: A STUDY OF THE TSETSE FLY. (a)

BY CAPT. E. D. WILSON GREIG, M.B., C.M.,  
Indian Medical Service.

THE author remarked that the study of tsetse flies and the diseases disseminated by them is not only of

(a) Abstract of a lengthy and interesting Paper read before the Indian Medical Congress, February, 1909.

scientific interest but of great practical importance. This becomes apparent when it is remembered that several hundred thousand inhabitants of Uganda alone have lost their lives from sleeping sickness, which is a tsetse fly disease. In Africa sleeping sickness has become one of the greatest scourges of recent times. As there is constant communication between India and Africa, it seems desirable for us to carefully consider the facts already discovered by the scientific investigation of this disease and the agent which spreads it; it is especially appropriate to deal with this subject in this Congress at Bombay, which is the great portal of India.

In April, 1903, I was deputed by the Government of India to proceed to Uganda to join the Sleeping Sickness Commission of the Royal Society. This Commission was very fortunate in having at its head so distinguished an investigator as Colonel (now Sir David) Bruce, F.R.S., to solve the very difficult problems which presented themselves, namely, the causation of this mysterious disease and how it was spread from the sick to the healthy. These questions, as this paper will show, were conclusively answered by the work of the Commission. After Colonel Bruce left for England, I carried on the work of the Commission with Lieut. A. C. H. Grey, R.A.M.C., until the end of 1904, and then proceeded from Uganda along the course of the Nile to Egypt, investigating the distribution of the tsetse fly and sleeping sickness.

The results of the Commission were summed up as follows:—

1. That sleeping sickness is caused by the entrance into the blood and cerebro-spinal fluid of a species of trypanosome.
2. That this species is probably that discovered by Forde and described by Dutton from the West Coast of Africa, and called by him *trypanosoma gambiense*.
3. That the so-called cases of trypanosoma fever, described from the West Coast, may be, and probably are, cases of sleeping sickness in the earliest stages.
4. That monkeys are susceptible to sleeping sickness and show the same symptoms, and run the same course, whether the trypanosomes injected are derived from cases of so-called trypanosome fever or from the cerebro-spinal fluid of cases of sleeping sickness.
5. That dogs and rats are susceptible, but that guinea pigs, donkeys, oxen, goats and sheep, up to the present, have shown themselves refractory.
6. That the trypanosomes are transmitted from the sick to the healthy by a species of tsetse fly—"glossina palpalis" and by it alone.
7. That the distribution of sleeping sickness and *glossina palpalis* correspond.
8. That sleeping sickness is, in short, a human tsetse fly disease.

**THE DEADLY GLOSSINA PALPALIS.**—The fly with which we are more particularly concerned in connection with disease in man is the *glossina palpalis*, as it is this fly which has been demonstrated to be the carrier of *trigambiense*, the causal agent of human trypanosomiasis (sleeping sickness), as well as three varieties of animal trypanosomiasis—"jinga cattle disease," "mule disease of Uganda," and the "Abyssinian fly disease." There is some evidence to show that other varieties of tsetse fly, e.g., *glossina fusca*, may convey the parasite of sleeping sickness as well as *glossina palpalis*. This important problem will no doubt be studied by the New Sleeping Sickness Commission in Uganda. When the *glossina* attacks man or animals its flight is direct and makes a slight buzzing sound. It frequently strikes men on the back of the neck, which is generally naked. It gives a sharp prick with its proboscis; this is frequently the first indication of the presence of the fly as it alights very gently. The bite does not leave much irritation, not so much as a mosquito sting. They are generally most active during the hot part of the day, becoming drowsy towards evening when they may be caught on the leaves of trees. Ensor, however, states "that in the Bahr-el ghazal province of the Soudan the tsetse fly, *glossina palpalis*, is most active from about sun-

rise to 10 a.m., and from 4 p.m. to sunset." They are said, however, to be active on moonlight nights—an important fact, as it is customary to take animals through "fly areas" at night to avoid the bites of the fly.

The tsetse fly, unlike other diptera, has a remarkable distaste for ordure. For this reason it is rarely found in the neighbourhood of towns or habitations.

The mean life of the female *glossina* is about three months, and a series of eight to ten pregnancies represent the fecundity of the insect; as a single larva only is laid each time, it will be seen that the tsetse fly is not very prolific.

Nagana, or the classical tsetse fly disease of animals, renders thousands of square miles of Africa uninhabitable. No horses, cattle or dogs can venture, even for a day, into the so-called "fly country." At one time it was thought that the tsetse fly killed the animals by injecting a poison into them in the same way as a snake kills its prey, until the investigations of Bruce in 1895 showed for the first time that the disease is caused by a minute blood parasite (*trypanosoma*), and that this parasite was conveyed from the sick to healthy animals by the bite of a variety of tsetse fly (*glossina morsitans*). He further showed that the wild game harboured the parasite without showing any signs of disease. They were immune or "salted" to this disease, and acted as "reservoirs" of the parasite; as soon as they were killed off or driven away, the tsetse fly disease disappeared, as occurred in the great Rinderpest epidemic amongst the buffaloes in 1906. Further the disappearance of the big game deprived the tsetse fly of a source of food, and so the numbers of tsetse flies became reduced.

**SLEEPING SICKNESS.**—The sleeping sickness has been known clinically on the West Coast of Africa for over a hundred years, but its cause and mode of spread remained a mystery until 1903. It extends along the Coast and up the river valleys from the 15° N. to 15° S. latitude. With the opening up of Central Africa it has extended from the Congo eastward into Uganda to the north as far as Gondokoro on the Nile, and south to Lake Tanganika. It is now one of the most serious scourges of modern times. In Uganda the disease was probably introduced into this area from the Congo by the remains of Emin Pasha's Soudanese troops and followers, some 10,000 in number.

The incubation period of sleeping sickness, that is, the interval between the bite of the infected tsetse fly and the appearance of enlargement of the cervical glands in the neighbourhood, is, according to Martin and Lebœuf, about ten days. In the early stage of the disease, the only definite clinical feature is a distinct enlargement of the lymphatic glands, particularly the cervical. This phase may be called the stage of polyadenitis, and is accompanied by an increase of the lymphocytes in the blood. On examination of the juice of these enlarged glands we were able to demonstrate the constant presence of trypanosomes in them; thus the specific nature of the glandular enlargement was established, and, in addition, a ready method of detecting the parasite in the tissues of man was discovered.

Sooner or later, the stage of polyadenitis is complicated by signs and symptoms indicating involvement of the central nervous system. It was to this last stage of the disease that the name sleeping sickness was given. It is produced by the trypanosome gaining an entrance into the cerebro-spinal system, and producing there the characteristic pathological changes which were first described by Mott. So far as present experience goes, when this stage is reached, the disease is invariably fatal. A number of cases die during the stage of enlargement of glands from intercurrent affections, e.g., pneumonia, etc.

The disease attacks both black and white, male and female, young and old without discrimination.

The patient acquires a curious sleepy or drowsy expression, hence the name of the disease. If the patient be spoken to at this stage, he answers in a hesitating manner, and his lips and tongue show fine tremors. As a rule he is greatly wasted, his gait is



uncertain, and finally, he becomes completely bed-ridden. This last stage lasts about three to six months on an average. In some cases the patient develops symptoms of mental derangement, and may become maniacal. The temperature keeps above normal during this stage of the malady, but about a week or two before death it becomes subnormal and remains so.

**THE PARASITE.**—After discussing the investigations by which it was established that *glossina palpalis* conveys the *trypanosoma gambiense*, the causal agent of sleeping sickness, from the sick to the healthy, Captain Greig said: We proved that up to 48 hours, but not longer after feeding on a patient suffering from sleeping sickness the tsetse fly (*glossina palpalis*) was capable of infecting a healthy monkey.

As a result of examination, it became evident that 50 to 75 per cent. of the population of the "Infected Fly Areas" in Uganda harboured the parasite of sleeping sickness, and they were carrying on their ordinary work showing few or no signs of disease, glandular enlargement being the only constant feature; these persons take the place of the wild game in the case of nagana and act as "reservoirs" or "carriers" of the parasites. It is this class of case which is especially liable to infect "clean" fly belts.

The examination of the population in a "Non-infected or Fly-free Area" showed that practically none of the inhabitants harboured the parasite, and such as did had a history of exposure in an "Infected Fly Area."

In 1903 the Sleeping Sickness Commission of the Royal Society in Uganda experimentally proved that the extremely fatal disease, sleeping sickness, was caused by a trypanosome, which was *trigambiense*. These trypanosomes are all very minute, and have a somewhat elongated eel-like form, their average length is one-thousandth of an inch. They are simple protoplasmic animals, consisting of one single nucleated corpuscle. They have no mouth; nutrition being effected by the imbibition of soluble nutrient material. When living they move rapidly about in the fluids of the body, being propelled by the contractions of a fin-like structure. They reproduce by a simple division; this is, so far as is known, the only method of reproduction of trypanosomes.

In studying the trypanosomes in the tsetse fly, the first question to answer was, whether the trypanosome underwent any development cycle in the tsetse fly similar to the life cycle of the malarial parasite in the mosquito. Minchin went to Uganda to study the life cycle of *trypanosoma gambiense* in the local tsetse fly, *glossina palpalis*. His investigations on this point have yielded entirely negative conclusions. He never found any signs of *trypanosoma gambiense* later than the fourth day after infection.

**METHODS OF PREVENTION.**—Dealing with methods of fighting the disease the paper continued that operations directed against the fly were on the lines of:—

(1) Destruction of the pupæ of the fly—(a) By clearing of undergrowth—particularly near towns, encampments, fords, etc., in fact, wherever human beings are brought together in numbers. The clearing is best effected by burning. The heat generated by the fire, and the exposure of the area to the full effects of the sun's rays by removing the shady undergrowth, render the district unsuitable for the fly by raising the temperature above the point favourable to the development of the nymphæ. So in time the fly will die out of these "cleared areas." The fly does not exist apparently in hot, dry countries, e.g., Egypt and India, probably owing to the fact that the nymphæ cannot develop under conditions found in these countries.

(b) Destruction of the food-stuff of the fly.—The fly as we have seen lives almost exclusively on blood, hence if deprived of this source of food supply a diminution of their numbers in the first instance, and ultimately a complete eradication might be expected. If the views of Koch be correct, the problem is further simplified, because as we have seen that he is of opinion

that the crocodile is the chief source of supply of blood for the tsetse fly, and he has accordingly recommended the wholesale destruction of these animals.

A fresh Commission under Sir David Bruce, F.R.S., is working in Uganda, and one of the problems which will engage the attention of this Commission is the proposition that the blood of the crocodile is the main source of food supply of the tsetse fly. The Report of this Commission will be awaited with interest.

(2) Destruction of the fly by other animals which will prey on it.—This might possibly be a practical line of attack. Certain kinds of fish have been employed to destroy the larvæ of mosquitoes. The cultivation of some plant might be found whose odour would be obnoxious to the fly.

As the investigations progress, other lines of attack on the fly will probably suggest themselves.

As to operations directed against the parasite which the fly transmits, it is obvious if we can devise means for preventing the fly from becoming infected by the *trypanosoma gambiense* it will cease to be a disseminator of sleeping sickness. In the case of animals infected by trypanosomes, the problem is comparatively simple, and consists in the slaughter of such animals as are found harbouring the parasite, and in this way the disease is stamped out gradually. In the case of man means have to be discovered by which it will be possible to completely destroy all the trypanosomes without damaging seriously the host. This problem has not yet been solved, but it is engaging the serious attention of a number of investigators. The whole subject of the treatment of trypanosomiasis by drugs is being considered by a Committee of the Royal Society. The Report of this Committee will be looked forward to with much interest. Until a means of destroying the trypanosomes in the vertebrate host has been found it is necessary for us to fall back on measures which aim at preventing the association of the harbourer of the parasite and the tsetse fly.

At the present time the authorities are fully alive to the importance of selecting sites for stations in a fly-free area. Previous to the work of the Commission in Uganda, what appeared to be a very favourable site for the Administrative Capital of Uganda, Entebbe, was selected. It was close to the Lake. During the researches of the Commission, the Botanic Gardens, Entebbe, furnished us with many specimens of *glossina palpalis*. On account of the presence of the tsetse fly the question of the removal of the station from Entebbe to a "fly-free area" was considered. However, extensive clearing operations were undertaken with the object of eradicating the tsetse fly from Entebbe. In selecting sites for stations in the future in sleeping sickness districts the question of the presence of tsetse flies will always require to receive most careful attention.

As regards personal protection, those going to countries, where tsetse flies and sleeping sickness occur, should acquaint themselves with the knowledge, which recent scientific investigation has placed in their hands, and rigorously follow out the indications. Before the nature and mode of spread of sleeping sickness had been accurately determined, persons living, even for a day, in districts in which the disease occurred, ran great risks. Now with suitable precautions these risks can be obviated, and this is the direct result of the scientific investigation.

## CLINICAL RECORDS.

### THREE OPERATIONS FOR BREAST CANCER—WITH COMMENTS.

By S. J. ROSS, M.D. VICT.,

Surgeon to Out-Patients, Bedford County Hospital.

THE first patient was a stout woman, æt. 55, who had a scirrhus carcinoma of the left breast, with implication of the axillary glands. In August, 1904, I removed her breast, together with both pectoral muscles, and cleared out her left axilla.

No drainage was used. The wound healed by first intention. In May, 1907, she had an attack of dyspnoea; in June dyspnoea was constant. The scar of the wound was perfectly sound; there was no local recurrence of the disease, but she died from extension of the disease to the bronchial glands.

The second case was that of a spare woman, æt. 62, who had a scirrhus tumour in her right breast. No axillary glands could be felt. I removed her breast, together with the pectoralis major. Upon opening her right axilla, several hard glands were removed which proved to be malignant. She died four years after the operation from involvement of the pleura and lungs, having a large hæmorrhagic effusion into her right pleura. There was no local recurrence in this case. No drainage was used, and the wound healed by first intention.

The third case was that of a woman, æt. 50, who had a very large scirrhus of the left breast, with a mass of axillary glands. I removed her breast, together with both pectoral muscles, and cleared out her axilla. No drainage was employed. The wound healed by first intention. I saw her a month ago, five months after the operation, and the wound remains sound.

*Comments.*—I think that it is most important in these cases that no drainage be adopted, but that the wound heals by first intention. We have often seen recurrence take place at a part of the wound where suppuration has taken place, or at the site where a drainage tube has been employed.

Secondly, we must realise that it is absolutely impossible in these cases, by examination of the mammary tumour, to divine how far cancer has spread to internal organs.

All these patients were cured, so far as the local affection was concerned, and yet two of them have died from spread to internal organs.

How unsafe it is to conjecture that, because a patient has been free from recurrence for three years, the patient is cured. The moral of these cases is that every patient who has a mammary tumour should have the tumour removed as soon as it is discovered. Who dare prophecy that a young patient who has an adenoma of the breast will not develop cancer in later years? In every case of cancer of the breast the axilla should be thoroughly explored, as often we are unable to discover glands which are present until we have exposed them by the knife. Some surgeons, in cases of small tumours of cancerous nature, are contented with cleaning the pectoralis major by removing the pectoralis fascia; but anyone who has studied the work of Stiles will understand how ineffectual such a method is.

The removal of the pectoral muscles does not materially increase the shock of the operation, nor does it interfere with the usefulness of the limb. In many cases we find glands near the coracoid process, which can only be effectually dealt with by removing the pectoralis minor.

In every case of cancer of the breast, however small and apparently localised the growth, we should explore the axilla. If this were adopted as a routine practice, we should have less of "recurrence" in the axillary glands.

## OPERATING THEATRES.

### GREAT NORTHERN HOSPITAL.

**RUPTURED ECTOPIC GESTATION.**—MR. ARTHUR EDMUNDS operated on a married woman, æt. 35, who had been admitted complaining of pain and tenderness in the hypogastrium. The pain commenced suddenly 48 hours before, whilst the patient was engaged in her household duties. It was only moderate in

severity, its intensity seeming most matured in the right iliac fossa. She was slightly sick on one or two occasions; she had had one child three years before, and the last period had come on three weeks before the onset of the pain, and presented nothing abnormal. There had been no symptoms referable to the pelvic organs, and no discharge of blood. On admission she appeared well nourished, slightly pale, but not extremely so; her temperature was 102, pulse 140. On examination, the abdominal wall was slightly rigid, but not very definitely so, and, indeed, the sensation obtained was more one of distension than of actual rigidity. No free fluid was demonstrated. Per vaginam, there was tenderness on pressing the uterus upwards, but no tumour could be made out.

The diagnosis in this case, Mr. Edmunds said, was obviously difficult, but it was pretty clear that something acute was happening in the lower part of the patient's abdomen, and the symptoms suggested an acute inflammation of either the vermiform appendix or the Fallopian tube; and the general condition of the patient, the fact that she had a clean tongue and no symptoms of intestinal disturbance, the absence of definite rigidity, suggested that it was tubal rather than an appendicular inflammation. The symptoms, however, were too indefinite for a conclusive diagnosis to be made. In such cases, where the patient is in her own home, it may be justifiable, he thought, to wait for definite symptoms which would clear up the diagnosis, but, even under these conditions, the surgeon can never be free from anxiety, as there are many cases of appendicitis in which the symptoms are as vague, although an operation reveals that the patient's condition has been one of grievous danger, and it is, therefore, advisable in all such cases for the patient's safety that she should be kept under the closest observation, and arrangements made for a surgical operation at any moment.

In the present case, as the patient was in hospital, and everything ready for an operation, the abdomen was opened 24 hours after admission. On incising the peritoneum, the diagnosis was made manifest, the abdomen was full of blood and clots, and on passing the hand down into the pelvis the ruptured sac could be felt in the left Fallopian tube, the other pelvic organs being normal.

It must be remembered, Mr. Edmunds remarked, that in these cases the hæmorrhage is going on slowly, even when the patient is blanched, obviously suffering from hæmorrhage. Cases undoubtedly occur in which a large vessel is opened, and the patient dies before any treatment can be undertaken; but in the majority of cases the hæmorrhage is not of such severity, so that, although no time should be lost in operating or during the operation, there is no need for any undue haste. This is specially important, inasmuch as the tissues around an ectopic gestation are extremely soft and pliable, and require great gentleness in handling. There is little difficulty in drawing up the right ovary and tube into the incision made for the removal of the appendix, but a similar amount of traction on a Fallopian tube which is the seat of a ruptured ectopic gestation would lead to further laceration and increased hæmorrhage. Accordingly, in the present case the blood was carefully evacuated, and washed out with large quantities of salt solution; the wound was widely retracted, and the intestines packed off with a sterilised towel, so that a good view of the pelvic organs could be obtained. The sac was then excised, but, in spite of all this care, another small vessel was torn across, probably in the round ligament, and required another ligature. This, however, was quite simple, as a good exposure of the parts had been obtained.

The importance of deliberation in these operations, Mr. Edmunds pointed out, cannot be too strongly insisted upon, as this not only shortens the time of the operation, but enables the operator to be certain that complete hæmostasis has been secured. Some fresh salt solution was then poured into the abdomen, and the abdominal wound closed. The patient's condition after the operation was quite good, and she is now making a satisfactory recovery. The ruptured sac was about an inch in diameter.

## CORRESPONDENCE.

### FROM OUR SPECIAL CORRESPONDENTS ABROAD.

#### FRANCE.

Paris, August 22nd, 1909.

##### LUMBAR PUNCTURE.

In all cases where cerebro-spinal meningitis is suspected, lumbar puncture should be practised. Evacuation of a cloudy liquid justifies the employment of intra-rachidian injections of specific serum without waiting for bacteriological examination.

The *modus operandi* of the puncture is as simple as the tapping for ascites or thoracentesis, and no practitioner should hesitate to practise it when indicated.

The arachnoidian sac, void of the medulla, and containing only the nerves of the cauda equina, extends, in the normal condition, from the second lumbar vertebra to the second vertebra of the sacrum; it is between these two extremes that the puncture may be made.

However, in order to avoid with certainty wounding the cord, especially in children where it descends rather low, it is preferable not to tap between the second and third vertebra, says M. Desfosses, who has published a very complete description of the operation.

M. Tuffier prefers the space comprised between the fourth and fifth lumbar vertebrae as being more easily mapped out, and the majority of surgeons have accepted this view.

A horizontal line drawn between the two iliac crests cuts the spinal column exactly at the level of the apophysis of the fourth vertebra.

The index of the left hand of the operator is placed over this apophysis, and follows its crest from above downwards to its internal angle; right beneath is the fourth lumbar space, the point of election.

A needle penetrating horizontally at this point, from before backwards, meets with, in succession, the skin, cellular tissue, lumbar aponeurosis, sacro-lumbar muscles, yellow ligaments, and the coverings of the cord.

The needle should be sufficiently long to pass through the several layers above-mentioned, while it should be strong enough not to bend or break if it encountered a bone, and these qualities are found in a platinum instrument.

It is frequently useful, says Dr. Desfosses, to adapt to the needle before operating an india-rubber tube to moderate and regulate the flow of the rachidian liquid.

As to the position of the patient, surgeons prefer the sitting posture, while physicians choose rather the lateral decubitus.

In the former case the patient sits on the edge of the bed, the legs slightly separated, the arms thrown forward, and the back rounded as much as possible. In the lateral position the head is slightly raised on a pillow, and the legs drawn up as much as possible, so as to obtain the maximum separation of the vertebrae.

When all aseptic precautions are taken, the back of the patient and the hands of the attendant well washed and rubbed with alcohol or ether, the index of the operator is placed on the spinous apophysis, and the needle is inserted right against the outer edge of the finger, and pushed with gentleness but firmness horizontally and slightly inwards.

A certain resistance is felt at the moment of traversing the yellow ligaments, and this, overcome with gentle pressure, the instrument penetrates into the rachidian canal; immediately a few drops of clear liquid are seen to issue from the free extremity of the needle, which is a sufficient indication that the operation has been successfully accomplished.

When the desired quantity of liquid is drawn off, the needle is withdrawn rapidly and the cutaneous orifice closed by collodion or a simple application of tincture of iodine.

As to accidents, lumbar puncture is in general an inoffensive operation, yet cases of death rapidly following the operation have been reported by Minet and Lavoix, who published accounts of 35 cases which occurred in France and other countries. However,

these deaths were especially observed in subjects suffering from cerebral tumours and in cases where a too large quantity of liquid was evacuated.

Headache is frequently observed and vertigo, rachialgia convulsions, vomiting, have been reported. But these symptoms seldom extend over 10 or 12 hours.

Certain precautions, however, should be observed in lumbar puncture, which, according to Dr. Sicard, are as follows:—Refuse to operate on any patient suspected of cerebral neoplasm, in whom functional disturbance, nausea, vertigo, and headaches are notably exaggerated in the horizontal position; leave the patient in bed 24 hours before operating; operate only in the lateral decubitus; leave the patient in bed 48 hours after the operation, lying on the back with the head low; remove, unless otherwise indicated, no more than one or two drachms of liquid at a sitting; employ a fine needle.

##### SIMPLE TREATMENT OF PHIMOSIS.

A simple treatment of phimosis is advocated by Dr. Thevemon, that of forcing back with gentle pressure the foreskin over the glans, a little each day; at the end of 6 or 8 days the difformity is corrected. Care should be taken against using too much force, or being in too great a hurry, for fear of creating paraphimosis.

Before operating, five or six ounces of a solution of boric acid should be injected between the prepuce and the glans to facilitate dilatation, as no attempt should be made at traction before the anterior extremity of the glans is visible.

The method is painless and well tolerated by children.

#### GERMANY.

Berlin, August 22nd, 1909.

##### SOCIETY OF GERMAN SCHOOL MEDICAL OFFICERS.

THIS Society was founded last year in Darmstadt, and its first annual meeting coincided with that of the German Society for School Hygiene, the annual meeting of which was held in Dessau in June last.

At this meeting Hr. Cuntz, of Wiesbaden, discussed the uniformity of health certificates, and laid down bases for arriving at some degree of uniformity. He desired first of all to have careful notes of the diseases children had already undergone on commencing school; (2) a watch over the course of these diseases; and (3) determination of the fact of any new diseases and a watch over their course. Subsequent examinations of all the school classes should be made at the end of the second year, or at the latest the third, and in any case in the eighth or last year. In all the later examinations a note must be made as to the general bodily development, as "good," "medium," "bad." The meeting agreed that principles such as those brought forward by the speaker ought to be adopted. They would aid in fulfilling the aims and requirements of school hygiene. They desired that they should be adopted and acted on in their unchanged condition.

##### NATURAL RESISTANCE TO TUBERCULIN.

The *Deutsche Med. Wochenschr.*, 23/09, has an article on this subject by Dr. Pickert, of the Sanatorium for Diseases of the Chest, Beelitz. He says that by the help of the methods of procedure of himself and Loevenstein for testing immunity against tuberculin, it was shown that occasionally the serum of tuberculous patients that had not been treated specifically had the power of destroying or weakening the specific action of tuberculin on the skins of tuberculous individuals. This property of neutralising tuberculin was present in a marked degree in the serum of patients suffering from tuberculous phthisis, in whom the course of the disease was an abnormally favourable one, and it was evidence of unusual resisting power on the part of the individual. In such cases, by means of injections of tuberculin, a heightened resistance against tuberculin was shown. In the same way the failure of cutaneous inoculation with weakened concentration of tuberculin was in favour of a certain natural resistance against infection.

In any case the fact that the same neutralising

material was present in the serum of untreated phthisical patients whose course of the disease was a favourable one was a striking proof that Koch's tuberculin treatment, in the best sense of the word, was a natural method of cure; it only imitated Nature's method.

Prof. G. Neumann has a paper on

#### TUBERCULOSIS IN CHILDHOOD

in a journal called the *Jugendwohlfahrt*.

In childhood, he says, the tubercle bacillus first settles in the lymph glands. From here it passes further, into the bones, joints, the skin, etc. (scrofulosis).

Tuberculosis injures the health much more, but shortens or destroys life much less frequently in childhood than is generally believed. The part attacked is very important. Within the scrofulous organs attacked it is not immediately dangerous to life, but under certain conditions it may break out from them, and especially in the course of other diseases; it may then spread through the whole system, or attack a vital organ such as the meninges of the brain, and lead to a fatal result. This possibility arises mostly during the first year of life; the strong, developing youthful organism easily triumphs over the tuberculosis, notwithstanding its increasing frequency. The age from the twelfth to the thirteenth year is less frequently menaced by death than any other period of life, and although most of the few deaths at this period are from tuberculosis, this changes nothing as regards the triumph of youth over tuberculosis. It is only after this period that pulmonary tuberculosis makes its appearance more and more, when the lungs are more distinctly disposed to it, and when diseases of occupation set up inflammatory irritations, and when, perhaps, a new infection is added to one already existing. These three factors, which by their multiplication lead to unfortunate results, have naturally in the individual case a very varying importance. We should make inquiry in every case as to hereditary tendency to pulmonary tuberculosis, and in such a case and particularly as regards choice of calling, we should carefully avoid any injury to the lung, a very difficult task, as the necessity of earning a living associated with unfavourable home surroundings only rarely allows the possibility of normal work for the lung in the open air—i.e., not too heavy, nor yet work that entails too shallow breathing.

#### AUSTRIA.

Vienna, August 22nd, 1909.

##### GASTRIC DILATATION.

At the Gesellschaft für Innere Medizin, Müller and Saxl had a sort of co-operative reading on their experiments and examinations of dilated stomachs. When the organ has been stretched ten times its original size, each fasciculi of the muscle is not reduced thus in thickness ten times, but may be half of its original size by the increase of other fibres. The empty stomach is not flabby and soft, but rather a somewhat compact hollow organ, which requires some force to open. The normal filling by the reception of food is effected by a lower pressure in the organism itself, which is not present when the individual fibres are elongated and the surrounding resistance reduced. If an animal be narcotised, and a cannula placed in the pylorus, after this the superior laryngeal nerve irritated, allowing water at the same time to flow into the stomach, the slightest pressure will cause the organ to dilate; if the animal be not narcotised, a much higher pressure than the normal will be the result. They concluded from their experiments that the mechanism of tonus in the organ resided in the vagus nerve. Atony of the organ was due to a loss of resistance in the muscular sheath of the stomach from defective nerve supply.

If the Röntgen rays be applied, it will be seen the food is taken into the cardiac end of the organ at first, and is then gradually carried forward into the body of the stomach, where the more active turning is produced in the normal condition. In the atonic condition the food falls into the organ as into a sack, where the churning is of a feeble erratic condition. Anæsthetics

have this relaxing power of the stomach, while alcohol stimulates the organ into an active state at first, but gradually loses this power, and finally leaves it in a lower state than at first. Cold fluids do not seem to affect it either way, while warm fluids relax the organ, and mineral waters slightly increase the tonus.

#### EXPERIMENTAL ANÆMIA.

At the Physico-Medical Gesellschaft, Faust recorded a case of bothrio-cephalic anæmia, and how he succeeded in producing a similar anæmia by using about 130 grammes of the dried parasite in healthy persons, and producing a similar anæmia with the damaged blood corpuscles when microscopically examined. These were not affected by water, but dissolved in ether, showing their fatty nature. This ether extract contains phosphorus, which at first was considered lecithin, but closer investigation proves it to be cholesterolin, and the three fatty acids stearic, palmitic, and oleic.

The oleic acid seems to be most active, as a simple experiment on the dog will prove. If the acid oleate of soda be injected into the bowel it will be rapidly absorbed and produce the same hæmolytic change as the bothrio-cephalic substance did in the former experiment.

Faust further fed dogs on the oleic acid, and used it subcutaneously in guinea-pigs with the same result, that the red blood corpuscles were reduced as well as the hæmoglobin in those that remain.

The practical results of these experiments are demonstrated every day by some organ suddenly becoming poisoned through fermentative decomposition, when a fatty synthesis takes place and is rapidly absorbed, producing all the deleterious effects of the oleic acid, as described in the experiments. It seems this acid either arrests the production of the blood corpuscles in the bones and hæmatic organs, or destroys the function of the red blood corpuscle, which leads to anæmia.

#### HÆMOLYSIS OF STREPTOCOCCI.

Polano gave the Gesellschaft a lengthy description of his experiments with the streptococci, particularly in puerperal fever. Schottmüller, he said, had selected or, rather, isolated, three streptococci that were malignant, viz.: streptococcus longus, viridis, and mucosus. Frommel has gone so far as to announce that when the streptococcus longus is found in the blood or lochia the prognosis is bad. Polano now contraverts this statement, as he has found the streptococci in 30 cases that were quite normal and no sign of fever experienced. There was, however, in eight cases decided hæmolysis, which could only be attributable to the presence of the streptococci in the blood.

He thought the same might be said of sepsis, angina, scarlatina, and pneumonia, that finding of streptococci in the blood was not always an unfavourable sign.

#### MORBUS BARLOW.

Hochsinger reported a case of Barlow's disease in a child at the breast. From birth it had been fed on the breast, but gradually became pale and white, with pains in the legs and arms. The knees, ankles, and forearms at their distal ends were greatly swollen. The Röntgen rays revealed blood effusion into the sub-periosteal space, where the pain was located. The child was fed on Nestlé's milk, and the whole trouble soon disappeared. He thought this disproved the notion that sterilised milk was the cause of the disease.

## FROM OUR SPECIAL CORRESPONDENTS AT HOME.

#### BELFAST.

THE COMPULSORY NOTIFICATION OF TUBERCULOSIS.—As noted in this column several weeks ago, the Belfast Corporation has been considering the adoption of the Tuberculosis Prevention (Ireland) Act. The Public Health Committee of the Corporation hesitated to recommend its adoption till they were assured that

certain difficulties which they foresaw could be got over, and to settle the matter a deputation from the Committee waited upon the Local Government Board in Dublin last week. The principal points discussed were the notification of certain prescribed forms of tuberculosis, and the position to be occupied by the Medical Superintendent Officer of Health in the administration of the Act. Some doubt had been expressed as to whether this officer would have power of entry in cases when he might wish to verify a diagnosis. The Board replied that if the Act were adopted, so far as the Medical Officer of Health was concerned, he would be provided with ample powers to make it effective. He could, if he so desired and thought it his duty, visit, inspect, and inquire into every individual case, and make himself thoroughly satisfied that the person notified was suffering from tuberculosis, so as to be a source of danger to others, and that everything was being done, as laid down in the Local Government Board's order, to prevent the spread of the disease. The deputation reported to their Committee, and it was unanimously resolved to support the recommendation for the adoption of Part I. of the Act. There is no doubt that after this the adoption will be agreed to by the Corporation. Its working will be watched with great interest by local medical men. It is easy to see where friction may arise, but with a little tact there is no reason why it may not be avoided.

**LONDONDERRY LUNATIC ASYLUM.**—The annual report of this institution has just been issued by the resident medical superintendent, Dr. Hetherington, and contains several items of interest. The patients number 532, of whom 289 are males, and 243 females. The average cost of gross expenditure, less repayment of loans, was £26 os. 8d. per patient, being 9s. 10d. less than the previous year. The net cost after deducting all receipts was £19 15s. 3d. per patient. The farm accounts showed a profit of £377, after deducting an estimated rent of £404. There was no death from accident or suicide. There were 41 epileptics, but no cases of general paralysis. As regards causation, according to Dr. Hetherington, physical causes predominate over moral. Domestic trouble is the commonest of the latter class, while of the physical causes heredity is far the commonest, intemperance coming next. Only ten of the whole number of patients are described as well educated, the majority belonging to the farm labouring class, with farmers and factory workers next.

## LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

### THE DECLINING BIRTH-RATE.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—To Mr. Clement Sers I commend a study of the following facts:—The quarterly return published in the *Times* of this morning, August 18th, shows again that the birth-rate in the second quarter of this year is the lowest recorded since the establishment of civil registration. The fall at the present rate will render the population stationary in about twelve years. This has been proved by Dr. Carl Pearson within the past few weeks. The annual increase amounts now to a little over 400,000 only. The residuum of partially and complete unemployables—the physically, mentally, and morally unfit—is being diminished, and will further decrease with more complete application of scientific methods now becoming more and more extended by the State. More and more of our surplus are capable of being made fit for colonial life. In every district there are to be found great numbers of "unskilled" labourers, most of whom, with or without preliminary training, are quite fit to wield pick and shovel in the colonies. Many of these men are married, with broods of young children who would develop into superior citizens in their new homes. Canada could take the whole of our normal surplus for a hundred years. She, as big as Europe, with inexhaustible virgin resources, could support hundreds of millions; she now contains 7,000,000 only. Besides

Canada, we possess lands in Australasia, in Africa, and our minor colonies as big together as two more Europes. They also could take between them more than our surplus for another hundred years. New Zealand, with its fertile soil and perfect English climate under the Southern Cross, has less than 2,000,000 of inhabitants; she could support 40,000,000 or more. The Imperial system of emigration needed to take out and father the new-comers is being gradually evolved through the activity of colonial governments, and it is absurd to suggest that a population question exists in these islands except in the sense that we need to promote increase by every means, and at the same time, of course, prevent the undue influx of the alien. There is ample room for the alien as well as for our own surplus in our colonies; the danger at present is that our colonists may be swamped by alien races, and the Empire become in time British only in name. The next fact is that the limitation of the family prevails most among the wealthy, well-to-do, and well-bred—the people able to support and put out in the world the normal number of children—and that the motive (as in France) is egoistic, anti-social, and anti-patriotic. It is at once a sign and a further cause of moral decay. The ideal is luxury, ease, and the pursuit of pleasure. The suppression of the philoprogenitive instincts produces in both parents easily recognisable deterioration. The evil effects upon the one or two children owned by parents are equally conspicuous, and the marriage system among the well-to-do, which ensures a mate for every girl with enough money, however ill-fitted to be a mother, constitutes a gigantic system of artificial selection encouraging the production of the unfit. The next fact is that nations that decrease in numbers without becoming superior in quality to their rivals for the dominion of the world will sooner or later go down before them. The Germans have at home 68,000,000—that is, over 10,000,000 more than the number of people of European blood in the whole British Empire, including India. There are, besides, several millions of Germans abroad, who still remain citizens of the Fatherland. The evidence is overwhelming that the Germans from below upwards, in their various strata of population, stand, on the whole, on a higher plane of civilisation than our people. Mr. Sers can satisfy himself as to this fact by inquiry, if he does not now accept it. He will not fail to appreciate its significance.

I am, Sir, yours truly,  
A STUDENT OF SOCIOLOGY.

August 18th, 1909.

### ANEURYSM—AN ACCIDENT.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—The astonishing case commented on in your columns, of a workman who was held to have died of an accident through the bursting of an aneurysm of the aorta makes one wonder where the old divisions between disease and accident have vanished to. If the natural termination of a disease is an accident, then we must all of us die accidental deaths. Surely it is as much a disease-process for an aneurysm to burst as for one's heart to fail in syncope. I was present last week at the post-mortem of a man who died suddenly at his work, and the autopsy revealed extensive atheromatous change in the aorta and coronary arteries. The coroner's jury found—very properly—that death had taken place from natural causes, but I could not help wondering how the case would have been decided by the wisacres of the Appeal Court if it had come before them. We are not accustomed to look upon coroners' juries as founts of wisdom, but I cannot help thinking that their decision in this case was better medicine, and better law, than is to be found on the Bench of H.M.'s High Court of Appeal. If the matter were not serious we could look upon it as merely a little display of *scintilla juris*, but, seriously, I cannot consider that I was wrong when, sixty years ago, I pronounced the law a "hass."

I am, Sir, yours truly,  
BUMBLE.

August 23rd, 1909.

## OBITUARY.

### DR. VON BOLLINGER.

We regret to announce that Dr. Otto von Bollinger, ordinary professor of the medical faculty and Rector of the University of Munich, died there on August 14th. He studied medicine at Munich, Vienna, and Berlin, and took his degree of doctor in 1867. He then returned to Munich, and worked there for several years as assistant to the late Dr. von Buhl. For a short time he subsequently lectured on pathology at the Zurich University. But since 1874 he resided in Munich, and there acted at first as privat docent, but in 1889 was promoted to the post of ordinary professor of general pathology and pathological anatomy at the veterinary school and at the University of Munich. He was also Principal of the Pathological Institute of the Munich University. He was a prolific writer of medical works, among them being books on "Meat Poisoning" and on the "Heredity of Diseases." His chief works relate to the pathology of the mortification of the spleen, tuberculosis, actinomycosis, and also meat poisonings and infections through animal poisons. His chief work, "Atlas und Grundriss der pathologischen Anatomie," appeared in 1896. Dr. von Bollinger was also the co-founder and editor of the "Deutsche Zeitschrift für Tiermedizin und vergleichende Pathologie," a periodical which has appeared since 1875. One of Von Bollinger's special domains was the question of illnesses of the heart after habitual beer-drinking.

### DR. G. W. DAVIDSON DEEPING, M.R.C.S., L.R.C.P., L.S.A.

We regret to record that Dr. G. W. Davidson Deeping has died at Hastings, where he lived since retirement from active practice in 1900. He had previously been for about 30 years a prominent medical practitioner at Southend, where he was a surgeon to the local Victoria Hospital and an Admiralty surgeon.

In his student days at Guy's Hospital he was a triple prize winner for the years 1868-70 inclusive, and in the following year obtained a gold medal in medicine. Dr. Deeping has also been a house surgeon and a resident obstetric surgeon to the hospital. His qualifications included L.R.C.P. and L.S.A., obtained in 1871, and M.R.C.S. in 1872. He was a J.P. for the county of Essex.

## MILITARY & NAVAL MEDICAL NOTES.

### PENSIONS TO CIVIL SURGEONS IN MILITARY SERVICE.—

A decision of some importance to civil medical practitioners who may have served in South Africa during the late war, and may have subsequently been admitted by commission into the Indian Medical Service, has been promulgated. The Secretary of State for India, in communication with the Army Council, has decided that such service in civil capacity shall reckon towards service for Indian pension. Officers who wish to claim the concession, but who have not yet established their claims thereto, should submit their applications for verification through the usual channel, stating the period of their service in South Africa, and the capacity in which they served during the war in that country. This is a generous concession, for it could not be claimed as a right. It will bring pension much earlier in some cases.

**TERRITORIAL SICK AND WOUNDED.**—To understand the position as regards the provision for medical and surgical aid to the Territorial troops, the Secretary of State has issued to the Territorial County Associations a "Scheme for the Organisation of Voluntary Aid in England and Wales." The Associations are enjoined to place themselves in communication with the Council of the British Red Cross Society without delay, in view of initiating the formation of voluntary aid detach-

ments if it is not the wish of the associations themselves to undertake their formation and training. A summary of the "scheme" alluded to appears in most of the military papers, but is too long for reprint in this column.

**FEVER AND HILL SANATORIA IN INDIA.**—News comes from Burma that half the battalion of the Royal Irish Rifles quartered at Maymyo have had to be sent to different hill sanatoria owing to the prevalence of fever. Maymyo has not got, as far as we know, the reputation of being an unhealthy station, so the question arises whether there are insanitary conditions in or about barracks—e.g., damp floors, etc.—to cause unusual sickness.

**FIELD AMBULANCE.**—The Eastern Mounted Brigade Field Ambulance (R.A.M.C.) unit has been encamped on the South Dunes, Yarmouth, since the beginning of the month, and useful and instructive work has been performed. The total strength of all units is 107. Field ambulance work has been done during the greater part of the time, and the men are given credit for keenness to learn everything possible about the work. The Principal Medical Officer of the district paid a surprise visit to the camp, and found everything in perfect order. The collection of dummy wounded by stretcher squads, etc., etc., was also inspected by Colonel Babbie, V.C., Inspector Army Medical Service.

**VACCINE FOR DYSENTERY.**—At the proceedings of the Indian Tea Association, it was mentioned that, on the suggestion of a firm of tea planters, the Director-General of the Indian Medical Service had been asked for information with regard to a serum which, it was understood, was of considerable value in the treatment of dysentery. The serum was the preparation of a member of the Indian Medical Service, but was not available to medical officers in the tea districts. The Sanitary Commissioner to the Government of India, to whom the matter was referred, has stated that, pending the completion of a special inquiry into the etiology of dysentery in India, now in progress at the Central Research Institution, it was not considered advisable to issue dysentery vaccine.

**HILL SANATORIA IN INDIA.**—The severe sickness, following on last year's rainy season, throughout Upper India, has made a considerable demand for hill accommodation for soldiers' families this year. Much has to be said both *pro* and *con* the removal of these families from the plains to the hills on account not only of splitting up the home, but also on the kind and extent of accommodation provided in the hills. Increased hut accommodation in the higher ranges of hill stations is necessary, for the misery experienced in tents, large though they may be, in the rainy season, is very great. The families of the rank and file are, in these days, of a better class, and it is to the advantage of the Army that they should be well accommodated, while it is to the advantage of India that the children should be reared in healthy surroundings. Fifty years ago Surgeon-General Sir William Muir—then P.M.O. in India, and subsequently Director-General A.M.S.—suggested that most of the troops should be huddled in the hill stations and attend on themselves.

**PRACTICAL JOKING.**—Practical joking in the Army has not infrequently ended in anything but a joke, and that is a fatal ending. The regrettable accident by which a man lost his life quite recently at Maidenhead, and another man was injured at Fleetwood, through blanket-tossing, will probably tend to end this form of horseplay. A strict order has been circulated in the command to this effect. We have to thank the Press in some degree for popularising this form of horseplay by illustrating it, and, no doubt, unwittingly encouraging a risky game. Practical joking years ago was as common in the commissioned as in the non-commissioned ranks, but it is now so emphatically denounced by the authorities that its practitioners are in imminent peril.



**FIELD TRAVELLING KITCHEN.**—A great deal of interest is attached to a new field travelling kitchen. It is with the Royal Irish Fusiliers quartered at Salamanca Barracks, Aldershot, the headquarters of the School of Cookery. A report on its serviceableness will be presented to the Army Council after the manoeuvres now proceeding. The advantages of having food ready on arrival in camp are unspeakable, and if the success of the new kitchen be pronounced, its adoption will assuredly come about. Certain service utensils are separate, each of which can be carried on a wagon for the supply of a detachment.

## SPECIAL ARTICLES.

### COMPARISON OF LAWS FOR THE PREVENTION OF UNQUALIFIED PRACTICE.

We are indebted to the Registrar of the General Medical Council for a copy of the "Digest of Laws in the British Empire and Foreign Countries for the Prevention of Medical Practice by Other than Legally Qualified Persons." (a) The book is, in the main, a reprint of the Appendix to the Report of the Unqualified Practice Prevention Committee (November, 1908), but contains a good deal of information obtained since that Report was drawn up. Information is given with regard to the legal regulation of medical practice in Great Britain and its dominions and dependencies, and also in most foreign countries. These amount in all to 108.

The following 76 British possessions and foreign countries forbid the practice of medicine by unqualified persons, under penalty of fine or imprisonment:—Basutoland, Bechuanaland, Cape Colony, Natal, Orange River Colony, Transvaal, Western Australia, Alberta, British Columbia, Manitoba, New Brunswick, Nova Scotia, Ontario, Prince Edward Island, Quebec, Saskatchewan, Newfoundland, Cyprus, Gibraltar, Ceylon, Hong Kong, Straits Settlements, Gambia, Mauritius, Northern Nigeria, North-Western Rhodesia, Nyasaland Protectorate, Seychelles, Southern Nigeria, Southern Rhodesia, Swaziland, Bahamas, Bermuda, British Guiana, British Honduras, Grenada, Jamaica, Leeward Islands, St. Lucia, Trinidad, Turks and Caicos Islands, Fiji, Austria, Hungary, Belgium, Bulgaria, France, Greece, Italy, Montenegro, Netherlands, Portugal, Roumania, Servia, Spain, Switzerland, Turkey, Japan, Mexico, United States of America, Costa Rica, Guatemala, Honduras, Nicaragua, Salvador, Cuba, Haiti, San Domingo, Argentina, Brazil, Chile, Colombia, Panama, Paraguay, Uruguay, Venezuela. To these it is probable that six others may be added:—Malta, Egypt, Denmark, Norway, Sweden, Ecuador.

In the following twelve countries certain privileges are reserved to qualified practitioners, and medical titles are protected by the imposition of fine or imprisonment on persons wrongfully making use of such titles:—New South Wales, Queensland, South Australia, Tasmania, Victoria, New Zealand, Sierra Leone, Barbados, St. Vincent, Falkland Islands, Germany, United Kingdom.

The following twelve countries have no law regulating the practice of medicine:—India, Wei-hai-Wei, British East African Protectorate, St. Helena, Somaliland Protectorate, Uganda, Zanzibar, Cayman Islands, China, Persia, Abyssinia, Morocco.

In the Gold Coast and Russia the restriction of practice is limited to inability to procure patent drugs. In Peru unqualified practice does not seem to be penalised.

Answers are given in detail in reference to all the above countries to the two questions—(1) What constitutes a legal qualification to practise medicine and surgery? (2) What legal provisions exist for the prevention of the practice of medicine and surgery by persons not legally qualified? All the information thus given is further summarised into a table convenient for reference.

(a) General Medical Council. London: Spottiswoode & Co. June, 1909.

## REVIEWS OF BOOKS.

### THE ANALYSIS OF FOOD AND DRUGS. (a)

THIS valuable monograph of "The Aids Series" has unfortunately been out of print for some time, Mr. Pearmain having died shortly after the appearance of the last edition. Mr. Moor has now obtained the services of Mr. Partridge as co-author, and the present edition is, to all intents and purposes, a new book, for there are innumerable changes and additions. The writers are well-known as authorities on their subject, so that we do not require to convince our readers as to the general accuracy of the statements made. We wish, however, to emphasise the great practical utility of a small compendium such as this, which condenses, summarises, and brings together a vast amount of information such as can only be obtained after much search through larger volumes and treatises. Too often we find such aids to study, contemptuously set aside by the reviewer as if they only encouraged indolence on the part of the student. This cannot be said of the present volume. The authors' statements in no sense resemble those of the mere cram-book. They are intelligent, scientific, and accurate, if condensed, as they must of necessity be.

This small book covers the entire ground of foods and drugs analysis, including even soap and urine, which are not quite of this nature. Only the most valuable modes of laboratory investigation are referred to, and the methods given are fully detailed without unnecessary remarks or padding. Throughout the volume suitable references are made to the various Acts dealing with sampling and adulteration. We cannot speak too highly of the lucid style in which the book is written. It is a model of what such aids should be. The book obviously appeals more particularly to candidates reading for diplomas of public health or for the F.I.C. examination. To all such we can heartily recommend this small volume. It is not only handy for study and reference, but is complete in itself. We might almost venture to suggest, though we are not a little afraid to do so, that a knowledge of the contents of this book, supplemented by the necessary practical work, will be found sufficient for all ordinary examination purposes. At all events, we may safely say that it may be used with great advantage as an aid to revision a week or two before the ordeal. It would be hard indeed, if not impossible, to write a better or more accurate summary of the subject than is given us in the present volume. We congratulate the authors on the superiority of their work, which is bound to make itself felt by those who take our advice and make good use of it.

### GYNÆCOLOGY AND ABDOMINAL SURGERY. (b)

THE two large volumes dealing with gynaecological and abdominal surgery which have been produced under the guidance of Drs. Howard Kelly and Noble, call for no unstinted meed of praise. Indeed, the names of so many distinguished surgeons and gynaecologists associated with the various chapters in the books is sufficient guarantee of the work's value. The first volume is devoted entirely to gynaecology, and is in every way excellent, the names of the authors of the different sections being: Brooke M. Anspach, J. M. Baldy, Henry Byford, John G. Clark, George Edebohl, William Ford, Anna Fullerton, F. Heurotin, G. Hunner, Elizabeth Hurdon, Howard Kelly, B. MacMonagle, Charles P. Noble, Alexander Skene, J. C. Webster, and X. O. Werder.

The illustrations are profuse, and the production all that could be desired. The chapters are excellently written, and concise and clear in their expression, the one dealing with the operative procedure in the radical treatment of carcinoma uteri being very well done,

(a) "Aids to the Analysis of Food and Drugs." By C. G. Moor, M.A. Cantab., F.I.C., Public Analyst for the County of Dorset and the Borough of Poole; Public Analyst for the City of Exeter, and William Partridge, F.I.C. Third Edition. Fop. 8vo. Pp. vi., 249. London: Baillière, Tindall and Cox, 1909. Cloth, 3s. 6d. net. Paper, 3s. net.

(b) "Gynaecology and Abdominal Surgery." Edited by Howard A. Kelly, M.D., F.R.C.S. (Hon. Edin.), and Charles P. Noble, M.D. Philadelphia and London: W. B. Saunders Company. 1907-08.

and the various steps shown by a sequence of admirable drawings. It is, of course, a necessity to find statements made throughout a work of this kind, where the individual opinions of each writer are expressed, somewhat at variance when treating subjects that are akin. For example, we find that while the Alexander-Adam operation is in one place highly approved, in another it is not thought so highly of, and ventro-suspension advised in many instances in its stead. Yet in the end these differences are of really small account, and the reader can decide for himself what mode of procedure to adopt.

The second volume forms a worthy companion to the first, dealing with complications following operations, Cæsarean section, operations during pregnancy, extra-uterine pregnancy, intestinal surgery, stomach, gall-bladder, pancreas, etc., the authors responsible for the chapters being B. M. Anspach, J. C. Bloodgood, John M. Finney, Barton Cooke Hirst, G. L. Hunner, Elizabeth Hurdon, G. Ben Johnston, Howard Kelly, Edward Martin, Floyd McRae, G. Brown Miller, B. G. A. Moynihan, J. B. Murphy, Charles P. Noble, R. Norris, Albert Ochsner, Eugene Opie, J. F. W. Ross, Stephen H. Watts, J. Whitridge Williams. These chapters contain most able expositions of *technique*, and, coupled with the illustrations which we have been taught to expect, appear to make some of the major operations almost easy.

Perhaps some of the illustrations are unnecessary, and certainly those portraying a multitude of hæmostats and little else are not the least instructive. Surely diagrams would have more clearly expressed the meaning. Drs. Howard Kelly and Charles P. Noble have always set themselves a very high standard, and this is fully maintained in the present volumes. Gynæcologists and surgeons owe already a large debt of gratitude to their efforts, and this is distinctly added to by their latest achievement, which should undoubtedly find a place in the libraries of all interested in operative work.

#### STUDY OF DISEASE IN CHILDREN. (a)

THIS volume contains the record of the work of the Society for the Study of Disease in Children for the past session, and with it closes the history of the Society as a separate entity. For the future the Society will be known as the Section for the Study of Disease in Children of the Royal Society of Medicine. During the past nine years the Society has done excellent work, and, to judge from the record in the volume before us, there should be a brilliant future before it under its new foster-parent. If the members of the Section will continue to produce work such as is given to us in the present volume, they will add in no little measure to the value of the Transactions of the Royal Society of Medicine. We fully sympathise with those members who wished to maintain the Society on the original lines that had proved so successful, but we believe that the decision arrived at was a wise one, and that, as a Section of the Royal Society of Medicine, an even wider sphere of usefulness will be opened to the old Society.

#### THE STEREOSCOPIC ATLAS OF OBSTETRICS. (b)

THIS volume concludes the Edinburgh Obstetrical Atlas, and provides students with a most interesting and well executed series of photographs of normal and pathological obstetrical conditions. The Atlas makes no attempt to embrace the entire subject of obstetrics, but, so far as it goes, it is admirable. One thing we miss. We are promised on the title-page a preface by Sir Halliday Croom, but we have not succeeded in finding it in any of the sections we have received.

Section IV. contains twenty-five stereoscopic photo-

(a) "Reports of the Society for the Study of Disease in Children." Vol. VIII. Session of 1907-8. By George Carpenter, M.D. 8vo., pp. lxxviii. and 504, seventeen plates. London: J. and A. Churchill, 1909.

(b) "The Edinburgh Stereoscopic Atlas of Obstetrics." Edited by G. F. Barbour, M.D., F.R.C.P. Edin., F.R.C.S. Edin., Senior Assistant to the Professor of Midwifery in the University of Edinburgh, and Edward Burnet, M.B., B.Ch., with a Preface by Sir J. Halliday Croom, M.D., F.R.C.P. Edin., Professor of Midwifery in the University of Edinburgh. Section iv. London: The Caxton Publishing Company, 1909.

graphs. The first half-dozen deal with breech, transverse, and face presentations. There is then a very admirable photograph of a "pendulous belly." Next come three photographs of Cæsarean section. Two of these are not very happy, as the blood obscures the field. The remainder of the Section consists of photographs of such conditions as placenta prævia, accidental hæmorrhage, retained placenta, abortion, ectopic gestation, bi-cornute uterus, and hydatidiform mole. Some of them are extremely good, particularly those taken from specimens lent by Prof. Harvey Littlejohn.

We have great pleasure in congratulating the Editors on the result of their labours, and on the effective manner in which they have dealt with a difficult subject.

#### ADVICE TO A WIFE. (a)

THIS well-known work has now reached its 15th edition, and has completed a sale of 390,000 copies. The present edition has been thoroughly revised and brought up-to-date by the editor, Dr. Robinson. He appears to us to have done his work carefully and well, and at the same time to have preserved the original style of the book. We are glad to note that he has also added a note on the frequency of cancer of the uterus, and the urgent necessity for immediate attention to any symptoms which suggest its presence. On the other hand, we do not know that it was necessary to put into the mouth of Dr. Chavasse a denunciation of "bridge" as one of the causes of ill-health in women! We are sure the present edition will be at least as popular as its predecessors.

#### GYNAKOLOGIE. (b)

GERMAN writers vary so much in their styles of writing that even those who have a good working knowledge of the language are at times put to great trouble to find out the true meaning of the author. It is therefore a pleasure to find a book containing such excellent matter so simply and clearly expressed. The "Gynäkologie" of Professor Gottschalk is a most delightful handbook, the matter is thoroughly explicit and put shortly, though it loses nothing by this, while the arrangement of things is admirable. Copious illustrations help to explain the text. It is interesting in these days to find that, though many gynæcologists object to pessaries as being useless and harm-working, that Professor Gottschalk still finds a place for them in modern gynæcology. *À propos* of this, it is worthy of notice that Fig. 14, after Hofmeier, illustrates a Hodge pessary *in situ* better than almost any other. The little volume is very well printed, and is a most convenient size.

## LABORATORY NOTES.

#### ALLOSAN.

WIEDEMANN, BROICHER AND CO. have submitted to us samples of Allosan, the allophanic ester of santalol. It does not represent a salt of an acid santalol ester, but it is the ester itself. For the esterisation of the santalol, allophanic acid ( $C_2H_4N_2O_3$ ), is employed. This acid was discovered by Liebig and Woehler, and given its name by them in 1849 (*alloe pavesey*, to appear different). Liquid bodies of objectionable taste or odour can, through esterisation by this acid, be changed into solid, tasteless, odourless, and non-irritant bodies. Allosan has the formula  $NH_2CO, NH, CO, OC_{15}H_{23}$ ; it is a white powder of agreeably mild and aromatic odour; it is without taste, and is perfectly non-irritant as regards mouth, oesophagus, stomach, intestinal canal, or kidneys, it does everything that Santalol does. It has the action of a good and faultless balsamic, and is being much used in the treatment of gonorrhœa.

(a) "Chavasse's Advice to a Wife." Fifteenth Edition. Revised by G. Drummond Robinson, M.D., F.R.C.P., Physician to the British Lying-in Hospital, Physician for Diseases of Women to the West London Hospital. London: J. and A. Churchill.

(b) "Gynäkologie." By von Professor Dr. Sigmund Gottschalk, Berlin. Wien und Leipzig: Alfred Hölder. 1909.

## SUMMARY OF RECENT MEDICAL LITERATURE, ENGLISH AND FOREIGN.

*Specially compiled for THE MEDICAL PRESS AND CIRCULAR.*

**The Function of the So-Called Motor Area of the Brain.**—Sir Victor Horsley (*Brit. Med. Journ.*, July 17th, 1909) states that, although he had frequently observed the effects of comparatively small lesions in the pre-central and post-central gyri, it was not till last year that he obtained the first example of an absolutely pure lesion of one of these gyri alone—namely, the gyrus pre-centralis, and one which, by repeated examinations, the writer satisfied himself afforded the final proof of the position advanced—namely, the sensori-motor character of that convolution. The case was that of a boy, æt. 14, who had had no illness and suffered no accident, but at the age of seven had gradually developed athetoid movements of the left hand, which then developed into violent convulsive movements of the whole upper limb. When the limb was quiet the purposive or voluntary movements were normal and powerful. The reflexes and sensation were also normal. On March 20th, 1908, the right Rolandic area was exposed. Electrical stimulation of the gyrus post-centralis produced no results, but stimulation of the pre-central gyrus produced the various movements of the left upper limb. The whole pre-central gyrus was removed. Briefly summed up, the effects in this case of the removal of the so-called motor centres for the upper limb in the gyrus pre-centralis were as follows:—Immediate: Disappearance of spasmodic movements; complete loss of voluntary movements of the left upper limb; post-axial and proximal atropognosis of the same; complete astereognosis of the left hand; moderate anæsthesia to all forms of sensation of the left upper limb. Remote (*i.e.*, a year later): Permanent absence of spasmodic movement; partial recovery of voluntary movements of the left upper limb; proximal atropognosis of left post-axial fingers; astereognosis of the left hand; slight tactile anæsthesia of the ulnar periphery of the left hand. The author concludes, in summing up, that:—(1) The so-called motor area of the human cortex cerebri is really sensori-motor. (2) The gyrus pre-centralis is in man the seat of representation of (a) slight tactility, (b) topognosis, (c) muscular sense, (d) arthric sense, (e) stereognosis, (f) pain, (g) movement. (3) The gyrus post-centralis is in man part of the arm area in which the sensory-motor function is of the same kind as that in the gyrus pre-centralis, but in it probably the provision for sensory co-ordination is greater, and that for efferent impulses less. (4) The giant pyramids of Betz cells are not essential for the performance of purposive or voluntary movements. (5) Purposive or voluntary movements can be performed after complete removal of the corresponding part of the gyrus pre-centralis. S.

**The Seriousness of Genital Lesions in the Male dating from or before Puberty.**—Eugene Fuller (*Post-Graduate*, July, 1909) has found that in that class of young men who as a rule have been grouped as neurasthenics, a little specialised questioning will bring to light the fact that the sexual function is crippled and deranged. In some of these cases there is a history of gonorrhœa contracted during boyhood, or of the sexual function being actively developed at a tender age. Local examination shows the penis and testicles well developed, and the prostate normal. The seminal vesicles, however, will feel small, and the tissues in the post-prostatic space about them more dense and inelastic than normal, even suggesting a condition approaching sclerosis. In the writer's opinion, repeated sexual acts in the patient's childhood causes an inflammatory reaction to be developed in the seminal vesicles, and the resulting exudates becoming organised into fibrous tissue, the vesicles being bound by adhesions are only partially developed. The author has operated on seven cases. He exposes the seminal vesicles, and

freed them of the old inflammatory adhesions, thus giving the organs a chance of expanding and developing. In all cases they have been drained to guard against a possible atonic distension, which might well result after the attenuated sac walls had been dissected free from their enveloping tissues. Five cases were operated on more than a year ago. They have been signally benefited. The mental symptoms have disappeared and the sexual power has returned. In the two recent cases the mental symptoms have disappeared, but the sexual power had not returned, as it does not in such cases for nine months or a year after operation. The primary object of the operation is the removal of the mental and nervous symptoms, thus making it possible for the individual to become self-supporting, the restoration of sexual disability being secondary. S.

**A Case of Adeno-Myoma Uteri.**—Purslow (*Journ. Obst. and Gyn. Brit. Emp.*, XVI., 1).—An abdominal supra-vaginal hysterectomy for multiple fibroids was done. The specimen was a typical example of multiple fibroids of the uterus. The separate tumours were cut across and had a firm white appearance with the exception of one small sub-peritoneal tumour from the posterior cornu, this had a softened area in the centre about  $\frac{1}{2}$  inch in diameter surrounded by firm white tissue, the central area having a much darker appearance under the microscope, the softened area showed typical adenomatous tissue, *viz.*, numerous gland spaces lined by a single layer of columnar epithelium and having a cellular inter-alveolar stroma. This adenomatous tissue was sharply defined and did not spread into the surrounding mass, which was ordinary fibromyoma. The growth resembled closely the tumours described by von Recklinghausen, the origin of which is ascribed by him to Wolfian rest cells. F.

**Further Observations on Transfusion, with a Note on Hæmolysis.**—Crile (*Surg. Gyn. and Obst.*, IX., 1).—The physiological adjustment of the altered quantity of blood in the donor and the recipient is greatly facilitated by the use of tables either end of which may be lowered or elevated. It is found that contrary to common belief, normal blood of one individual does quite as well as that of another. Kinship is of no special advantage. The heart has proved itself to be the most important consideration in transfusion, when the recipient's heart presents a lesion to which there has been developed a compensating hypertrophy, this muscle is presumably working near its maximum, its normal factor of safety therefore may be almost wholly lost. If the circulation of an ex-sanguinated patient is rapidly recruited by fresh blood under a full head pressure from the radial artery of the donor, there will be an immediate and striking improvement. It is just at this point that the greatest caution is necessary; the anæmic myocardium may be unequal to performing the increased burden thrown upon it and dilatation may follow. If acute dilatation occurs the head-down posture must be maintained to supply the brain, although the reverse position would relieve the dilated heart. When the heart recovers the head may be raised and after about 10 minutes the flow of blood may be restarted slowly. The most effective active measure to overcome an acute dilatation is rhythmic compression of the chest. Once the first stage of the anæmia of the myocardium is passed but little further trouble need be anticipated until the normal volume of blood has been regained. There are two notable groups that have shown themselves susceptible to

results, one in which there has been internal hæmorrhage, the other, in which the patient has been reduced by long continued disease to such a degree as to render an operation unsafe. In these cases the donor is attacked and enough blood transferred to render the recipient safe for an anæsthetic. Blood can be transferred as needed during the operation, and at the end of the operation, to ensure safety of the circulation. The author has transfused 18 cases for tuberculosis. In most of these the donor's blood hæmolyzed the blood of the recipient in the test tube but not in the patient. He concludes that though there is hæmolysis in vitro it does not follow that there will be necessarily in vivo. F.

**Acute Infective Endocarditis treated by a Vaccine.**—Conder (*Practitioner*, Aug., 1909) records a case of acute pneumonia in a man, æt 43, which was complicated by acute infective endocarditis which was treated by a vaccine prepared from the patient's own blood and ended in recovery. This complication in acute pneumonia is not rare, Osler found it present in 16 out of a 100 autopsies, and states that it "seems to be of an unusually malignant type." The patient was attacked with an acute pneumonia involving the lower lobe of the right lung. Previous to this, he had a lesion of his mitral valve resulting from an attack of rheumatic fever in childhood, but did not suffer from any disturbance of the circulation. The *Diplococcus Lanceolatus* (Pneumoniæ) of Fraenkel was recovered from the sputum, and later on pure cultures of this organism were also recovered from the patient's blood. Five days after the onset of his illness the patient was injected with a dose of vaccine containing 50 millions of his own pneumococci. Three days later a similar dose was given and then at intervals of three days, doses containing 100 million cocci were given. After this the infective process appeared to be at an end, and no further injections were given. During the period of administration of the vaccine, the opsonic index was taken and the following results were recorded. On the day of the first injection 1.01, on the next day, 1.04, later on during this day it had risen to 2.90, subsequently it declined somewhat and after the last injection was 1.28. The diagnosis of acute infective endocarditis in this case was based on the following observations, (1) The evidence of former valvular disease; (2) the presence of acute pulmonary inflammation; (3) the occurrence of repeated rigors, and subsequently of repeated profuse sweats; (4) the sudden development of a loud, rough cardiac murmur in the course of the pneumonia; (5) the irregularity of the temperature; (6) the extreme embarrassment of the heart, (7) The ease with which the organism was obtained from the blood, the loud rough systolic murmur persisted after the recovery of the patient, though the acute dilatation of the heart quite disappeared. K.

**A Remedy for Paroxysmal Tachycardia.**—Fairbrother (*Journ. Amer. Med. Assoc.*, July 24th, 1909) records a form of treatment that he has found effective in cutting short attacks of this distressing condition from which he has suffered since childhood. In his earlier life the paroxysm averaged about one a month, but for the past twenty years about one a week. Their duration varied from a few minutes to twenty-four hours, the frequency of the heart-beat rising from 72 to 140 or 200 a minute. About a year ago he discovered accidentally on being compelled to run quickly to catch a street-car during an attack, that the exercise was followed by a sudden cessation of the frequency of the heart-beat. Since that time he has repeated the observation and now is always able to cut short the attack at once in this way. Instead of running however, which he found sometimes inconvenient, he has adopted energetic skipping movements, from 60 to 100 of these being usually sufficient to end the attack. Dr. Fairbrother says "It is simply the producing a sufficient volume of blood in the heart to overcome the nerve tangle which is the cause of the trouble. Now, as I have followed this practice, with invariable success,

for almost an entire year, and covering about fifty attacks, I feel safe in giving it to the profession as a remedy." K.

**Successful Omentopexy in Cirrhosis of the Liver.**—(*Intercolonial Med. Journ.*, June, 1909).—White records the history of this interesting case. The patient, a child, æt. 9, had been in delicate health since birth, and for about eighteen months previous to her admission to hospital had suffered from an increasing swelling of the abdomen. She had never been tapped before admission to hospital. The child's parents were temperate but the mother stated that on account of the delicate state of the child's health she had been in the habit of giving her from half to three table-spoonsful of whiskey each day. The Wassermann serum test for syphilis gave a negative result. After admission to hospital the child was tapped five times at intervals of a fortnight, but only with temporary relief. The abdomen was then opened and the operation of omentopexy performed. The liver was found in a typical hobnail condition and the spleen was considerably enlarged. After the operation, the child was tapped three times in five weeks, but after that, marked improvement set in and further tapping was not necessary. Two months after the operation, the child appeared in good health and all signs of ascites had disappeared. K.

## MEDICAL NEWS IN BRIEF.

### A Fortune for the Pasteur Institute.

In a few days the Pasteur Institute will receive the large sum of £1,200,000, which was bequeathed to it by the late M. Osiris. M. Osiris, who was a rich and philanthropic Jew, founded in 1903 a triennial prize of £4,000 to be bestowed on "the person who had rendered the greatest service to the human race during the three preceding years." The prize was awarded to Dr. Roux, the head of the Pasteur Institute, for the discovery of the "anti-diphtheria serum," which has been the means of saving the lives of many thousand children. The millionaire was much astonished to learn that Dr. Roux had made over the whole of the money to the institute of which he is the head, although he is a poor man with a salary of some £250 a year, and lives in a very small apartment, for which he pays £24 a year rent. M. Osiris was so much struck by the unselfish conduct of the man of science that he made the doctor's acquaintance, and they became firm friends. M. Osiris one day asked him why he had given the money to the institute.

"All that I am," replied Dr. Roux, "I owe to the Pasteur Institute, for all my experiments and discoveries have been made there. Besides, the institute is very poor, for we have no income except what we make by the sale of serums, and though that brings in enough to keep the establishment going, some fresh remedy may any day be discovered, in which case I fear the institute would have to close its doors for want of funds."

The millionaire said nothing at the time, but at his death, which occurred a year or two afterwards, it was found that he had left the bulk of his wealth to the Pasteur Institute, as a token of admiration for the scientific attainments and self-abnegation of Dr. Roux.

### Death under Anæsthetics.

At the Paddington Coroner's Court, Mr. W. Schroder held an inquest on George Thomas Lipscombe, aged 53, a shop porter. In the middle of March he came home and complained of pains in the side. He told his wife that he was standing on a pair of steps, on the stairs, cleaning a mirror, when the steps gave way, and he fell on a bar and hurt his head, ribs, and arms. There were several bruises, so witness went with him to St. Mary's Hospital, where he was treated. Since that time he had attended regularly for treatment, although he still continued work until five weeks ago. On July 30th he was admitted for the purpose of an operation for a growth in the neck, and

witness knew that he would be given an anæsthetic. She heard of his death on Friday. Mr. William C. Loudon, manager of the Edgware Road branch of the firm, said the man had been there for seven years. He could not ascertain that anyone saw him fall, and he certainly made no complaints that his illness was caused by an accident on their premises.

Dr. Bryan, of the hospital, said the man was admitted on the 23rd ult., although witness knew that he had previously been treated there. He was suffering from a tumour on the right side of the neck. He was given an anæsthetic, but the operation had not been commenced when the patient suddenly ceased to breathe, and, despite all efforts, died very shortly afterwards. He had since examined the body, and found the heart muscle diseased and degenerated, which would render it liable to sudden failure. There was a large tumour in the neck, attached to the muscle, and continuous with the glands, probably of a tuberculous nature. Death was due to heart failure, when under the influence of anæsthetics. It was possible, but not probable, that an injury might have caused the formation of the blood cyst in the neck.

Walter Warren, porter at Messrs. Gardiner's, said the deceased was standing on a ladder in the mechanics' department in the basement, cleaning and polishing the woodwork of the staircase, when it slipped from beneath him and he fell with it a distance of seven or eight feet, striking his head on the gas heater. Witness assisted him. His eye was cut, but he continued his work. He did not strike his shoulder. Since that time they had arranged amongst themselves that someone should hold the ladder, when cleaning high up. They never used safety grips. Geo. Henry Davey, another porter, corroborated, and said the extension ladder was full out at the time. Deceased complained of pains in the face. The coroner adjourned the inquiry in order that the result of the microscopical examination of the kind of tumour might be known.

#### Midwife Fined.

A PROSECUTION under the Midwives Act, 1902, came before the Mayor (Ald. Taylor) and other magistrates at Mansfield on August 18th, when Dinah Ann Peace, of Bould Street, was summoned by the Notts County Council.

Mr. J. H. White appeared to prosecute, and said Mrs. Peace had got her name placed on the midwives' roll, which was the only roll for properly certificated midwives, but owing to certain circumstances, which it was not necessary to go into, her name was removed, and was not on the roll for the year 1909. The complaint was that, although her name had been removed from the roll, the defendant continued to put out a plate which bore words to the effect that she was a certificated midwife, and she also exhibited in her window a certificate stating that she was a certified midwife.

Dr. Handford, Medical Officer of Health for Notts, was called, and, in cross-examination by Dr. Tarachand, said the defendant was not qualified to call herself a certified midwife after her name was removed from the roll, notwithstanding the fact that she had a certificate.

Dr. Tarachand then directed his cross-examination to the complaints made against the defendant, but Mr. White objected, on the ground that it was irrelevant. Dr. Tarachand, however, said he "wished to expose a flagrant act of injustice."

Inspector Chandler, Sergeant Dye, and P.C. West spoke to seeing the brass plate and certificate exhibited in the defendant's window during the month of June last, and Supt. Rodgers deposed that he attended an inquest at Mansfield on May 25th, when Mrs. Peace gave evidence.

For the defence Dr. Tarachand said Mrs. Peace was entitled to act as a midwife, and to exhibit her plate, inasmuch as she had received a certificate from the Lying-in Hospital, City Road, London. The defendant had attended more than 300 cases with no ill-effects to the patients, and it was to be regretted that such a capable and hard-working woman should be deprived of her right to earn her living through certain trivial

irregularities in not observing the rules of the Board, such irregularities being the result of her inability to write, and not her inability to practise.

Dr. Tarachand called Miss Lessy, the inspector of midwives for the county, and caused some amusement by his request to treat her as a hostile witness before she gave evidence. The witness admitted that defendant had attended numerous cases, and that, so far as she was aware, the patients had gone on all right. Counsel then questioned witness on the entries in defendant's register, and she mentioned certain reports and complaints she had made.

The Bench imposed a fine of £2 and costs.

#### Diphtheria in Yorkshire.

LAST year an outbreak of diphtheria in Pateley Bridge, West Riding, caused considerable anxiety in the township of Bishop Thornton and the hamlets in the vicinity. A number of cases were notified, and the matter assumed somewhat alarming proportions before a check could be put to it. The outbreak necessitated the closing of the Church of England schools at Bishop Thornton, where many of the children in the district attend, and, in consequence of suspected infection at a later period, the schools have been closed for a greater portion of this year.

Representations were made to the authorities, with the result that an inspection of the drainage of the locality was carried out. That action in the matter is needed is emphasised by a further crop of cases in the small hamlet of Shaw's Mill, in the Bishop Thornton township, four new cases having been reported during the past fortnight. The sufferers were at once removed to the Pateley Bridge Isolation Hospital, and the Pateley Bridge Urban District Council, alive to the dangers of a second epidemic, are promoting a scheme for the improved drainage of Shaw's Mill. Land, it is understood, has been acquired lower down the valley, and the scheme is to cost about £800.

#### The Health of Southwark.

THE Medical Officer of Health for the Borough of Southwark (Dr. G. B. Millson), in his annual report, states that the estimated population of Southwark at the middle of 1908 was 210,442. The death-rate was 16.3 per 1,000, as against 18.0 in 1907. The birth-rate, 28.1 per 1,000, was the lowest in the history of the borough. In 1900 it was 33.3 per 1,000. The infantile mortality was 131 per 1,000 births, the lowest figure ever recorded; much of this had been brought about by the disposition at the present time of mothers to breast-feed their children, and to the Notification of Births Act, 1907. Of infectious diseases, cerebrospinal fever had proved fatal in 6 cases. The number of cases of diphtheria was the smallest on record, and there had also been a considerable reduction in the mortality in tuberculosis during the last seven years. The mortality was, however, still very high. The deaths from phthisis were 414.

#### Cholera at Stockholm.

A STOCKHOLM merchant who had been on a visit to St. Petersburg was taken ill with cholera last Thursday. The case, however, says Reuter, is a very mild one. The invalid is still isolated, although he appears to have been in perfect health during the past few days. No other case has occurred, and the sanitary condition of Stockholm is most excellent. Tourists are beginning to return to Stockholm, and the large hotels, which during the last few weeks have been empty owing to the strikes, are now full.

#### Doctor's Sudden Death.

MR. JOHN TROUTBECK held an inquiry at Battersea on August 19th, concerning the death of Dr. James Edward Mennie, aged thirty-one, of Queen's Road, Battersea. The widow stated that Dr. Mennie had been taking chloral since November to induce sleep. He had a very busy day on Monday, and in the evening he went to lie down. At bed-time he remarked that he had forgotten to take his medicine. He returned a few minutes later and went to sleep. His heart was beating very quickly, but suddenly it ceased, and she sent for

a doctor. A servant deposed to having heard Dr. Mennie say that if the hot weather lasted it would kill him. Dr. Trevor, pathologist, said that death was due to heart failure, while Dr. Mennie was suffering from degeneration of the heart accelerated by a dose of chloral. He was in such a state that a dose of chloral which might have been taken with safety at ordinary times would prove fatal. The jury returned a verdict of accidental death.

#### **New Examination Hall for the London Medical Colleges.**

As referred to in a previous issue, the negotiations which have been pending between the Royal College of Physicians of London and the Royal College of Surgeons with regard to the acquisition of a site for a new examination hall, the present building on the Victoria Embankment having been sold by the two colleges to the Institution of Electrical Engineers, have now been completed. The site chosen for the erection of the new hall is at present occupied by four houses in Queen Square, Bloomsbury. It is understood that one of the houses will be adapted for the use of the Imperial Cancer Research Fund, and that the pulling down and re-building operations will occupy about three years. Meanwhile, the examinations for the conjoint diplomas of these colleges will still be conducted at the hall on the Victoria Embankment, rooms having been temporarily leased to the colleges by the Institution of Electrical Engineers.

#### **Municipal Bacteriology.**

THE return for the six months ended June 30th, just issued by Dr. Priestley, Medical Officer of Health for Lambeth, shows that the medical men of the borough are taking advantage of the facilities afforded by the municipal laboratory to enable them to diagnose any doubtful cases that may come under their observation. Dr. Priestley makes these examinations free of charge to medical men in the borough. During the six months 109 tubes of sputa were examined for tuberculosis, and 273 specimens of throat and nose membranes and discharges for diphtheria.

#### **Liverpool City Hospitals.**

THE Medical Officer of Health for Liverpool, and the Medical Superintendent of the City Hospital, Fazakerley, together with the City Treasurer and Controller, have just issued annual reports with regard to the city hospitals. From these it appears that at the present time the number of beds available in the various hospitals is as follows:—North, 162 beds; South, 100; East, 152; Parkhill, 235; Fazakerley, 350; and Fazakerley Annexe, 160; total, 1,159. The value of the hospitals and the immense amount of useful work performed is shown by the fact that no less than 6,213 patients were treated within their walls, the great majority of these being cases of scarlet fever. The report further states that steps have been taken by the committee to render the training of probationer nurses more efficient. Probationers are received at some, but not all, of the city hospitals, and under the arrangements now arrived at the system, which includes lectures as well as practical and clinical instruction, will render the course of training a very full and complete one. Fifty beds at Fazakerley are now devoted to the treatment of cases of tuberculosis. Evidence is not yet available to show how far the disease has been permanently arrested in those patients who have been discharged from hospital, but a system is adopted by which these patients shall present themselves at regular intervals for examination. Visits by inspectors of the health department to the houses of patients result in a continued observance of those hygienic methods which the patients have acquired in hospital so far as their circumstances permit. The report gives interesting and valuable statistics of the number of cases and types of disease dealt with in each of the city hospitals.

#### **The Metropolitan Asylums Board.**

THE report on the work of the Metropolitan Asylums Board during the year 1908, submitted at a recent meeting of the Board, is a source of some satisfaction. During the financial year ended at Michaelmas, 1908,

the net expenditure of the Board was £1,121,942, being a decrease of £13,841, as compared with the previous year, although the average daily number of inmates maintained was 485 in excess of the average of the previous year. For the second year since its establishment in 1867, it was not found necessary to raise any loan in respect of building or other works, and its indebtedness on existing loans was reduced by £181,745, leaving the capital indebtedness at £3,025,044, while the estimated value of its property exceeds double the amount.

The total number of patients admitted into the Board's fever hospitals during the year were—from scarlet fever, 19,629, with a mortality of only 2.56 per cent.; diphtheria, 5,230, with a mortality of 9.73 per cent.; enteric, 509, with a mortality of 16.28 per cent.; typhus, 2, with no deaths; cerebro-spinal meningitis, 3, with 1 death; other diseases, 2,594, with a percentage of 5.68 deaths.

#### **A Magisterial Pronouncement on Vaccination.**

ON Friday last Annie Rebecca Telford was summoned at Bow Street Police Court for unlawfully and wilfully giving false information to a deputy-registrar concerning the birth of her child.

The false information was given for the purpose of evading the Vaccination Acts. The practice of making false statements of this kind for the purpose of avoiding vaccination was a growing one, and in consequence the Registrar-General had ordered these proceedings to be taken. The defendant, who had made false statements on two previous occasions, now pleaded guilty, and said that she had acted as she had done as she dreaded vaccination. She had lost one child through vaccination, and she was afraid of losing her youngest one in the same way. It was very delicate.

Mr. Curtis-Bennett (the Magistrate) said that the defendant might be mistaken as to what caused the death of her child. He (the Magistrate) had been vaccinated four times, and was ready to be vaccinated again if necessary. If the defendant's child was too delicate for vaccination she should take it to a doctor, who would have the operation postponed if necessary. The defendant was liable to a penalty of £10, but she would only have to pay 20s. and 23s. costs. The defendant said that she was very poor, and the Magistrate granted her time for payment.

#### **A Death under Spinal Anæsthesia.**

AN inquest was held on Friday last, at Clerkenwell, on the body of a child, aged 1 year and 4 months, who had been received into the Great Ormond Street Children's Hospital to undergo a necessary surgical operation. A requisite preliminary to this was the administration of an anæsthetic, and on Tuesday, after a spinal injection of stovain, and before the operation was commenced, the child suddenly expired.

Mr. G. E. Ward, F.R.C.S., who made an autopsy, ascribed death to respiratory failure consequent on collapse of the lungs, and whilst the child was under the influence of the anæsthetic.

Dr. Gray, Hospital Superintendent, said that in the circumstances stovain was the best possible anæsthetic. He could not say that the stovain took no part in accelerating death. He had injected stovain in 200 cases.

The Coroner asked if spinal anæsthesia was on the increase, and was answered in the affirmative.

A verdict of death by misadventure was returned.

#### **Requests to Medical Institutions.**

A LARGE sum, which, after payment of legacy duty and other expenses, will probably amount to about £43,000, has been bequeathed under the will of the late Mr. Edwin Joseph Alfred Ayliffe, of Paris and London, who died on July 10th, to 26 charitable institutions, among which the following hospitals will receive about £1,500 each:—London Hospital, Royal Free Hospital, Westminster Hospital, Charing Cross Hospital, Middlesex Hospital, St. George's Hospital, University College Hospital, Cancer Hospital, Hospital for Consumption, North-Western Hospital, Chelsea Hospital for Women, Metropolitan Ear Hospital, Friedenheim Hospital (Swiss Cottage, N.W.).



## NOTICES TO CORRESPONDENTS, &c.

**OUR** CORRESPONDENTS requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

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J. G. SWAIN (Wolverhampton).—Curiously, shortly after the receipt of your letter, a public announcement was made of the report of a sub-committee of the King Edward's Hospital Fund for London, upon the subject of charity entertainments. While it shows that neither extravagance nor abuse exist to any large or general extent, it, nevertheless, advises the perusal of its report which may be of service where proposed entertainments are under consideration.

### NOVA ET VETERA.

In the new Indian monthly "Medico-Chir. Journal of the Tropics," edited by S. K. Mullick, M.D.M.S., Edin., there is an interesting article on pregnancy, and the native superstitions connected therewith. During an eclipse the pregnant women remain inside their houses. One corner of their sheet is dyed with turmeric to keep off the evil influence of Raksh the demon, and a wooden pestle is kept loose for them to frighten him away. No harm can be done to those who take such preventive measures in due time.

They avoid passing under haunted trees, for fear that the child will be born with "feet presentation." Various kinds of charms are employed to protect the women during pregnancy. Wearing of glass bangles of green colour is recommended and after the seventh month an iron bangle too is added to them to strengthen their magical properties. From the eighth month wearing of cloths, of two bright colours and smelling of strong sweet odours are left off. Cutting of nails too is discontinued. When the time of delivery approaches near, pregnant women cannot participate in the worship of the drum if any marriage is celebrated in the house. The drum inside is empty and touching it during this period is liable to cause premature birth and emptying the womb from the precious load before its proper time. The writer also describes some very amusing devices by which women try to find out before birth, whether the child would be male or female.

M. J. H. (Leeds).—The cases referred to go to prove the uncertainty of the law, but the extraordinary divergence of opinion among the judges concerned in its administration. Why one woman should be sentenced to ten years' penal servitude for an "illegal operation" and another under exactly similar conditions to twelve months, is an enigma that can be explained only by the judges concerned. We cannot enlighten you.

### A ROYAL M.D.

ONE of the few Royal medicine men is having his seventieth anniversary royally celebrated in Bavaria. Duke Charles Theodore, M.D., is not only a popular Prince, but a more than popular practitioner. His mission in life declared itself somewhat late. He was eight-and-thirty when he entered the Munich faculty as a student; and there were those who laughed and chaffed at the notion of this mature student really meaning business. Duke Charles Theodore, however, not only meant business, but got it. He was soon in the enjoyment of a large practice at Tegernsee, and only retired from it when he specialised as an oculist, and started a "Klinik" in the Bavarian capital. Now his name and fame are great throughout the Fatherland.

When the Kaiser met with that unfortunate accident aboard his yacht in northern waters, and the return end of a rope inflicted a dangerous back-hander on the Imperial eye, it was at the desire of the Kaiserin that Duke Charles Theodore was called in, and it was he whose treatment restored the injured optic. Naturally, the Duke has ever since been regarded with a favourable view in high quarters, and, naturally also, his practice has increased, until now the Munich "Klinik" hardly suffices for its daily crowd of patients.—*Pall Mall Gazette*.

A YORKSHIRE PRACTITIONER.—According to reliable, but non-official, estimates, midwives now conduct about half the confinements in England and Wales. In Ireland and Scotland the proportion is considerably smaller.

## Appointments.

BROWNE, FRANCIS JAMES, M.B., Ch.B.Aberd., District Medical Officer by the Bedwellty (Mon.) Board of Guardians.  
DAYSON, FREDERICK ADAMS, M.D., C.M.Aberd., M.R.C.S., Deputy Port Medical Officer of Health for the Dartmouth and Totnes (Devon) Port Sanitary Authority.  
DRAKE, JOHN ALEXANDER, M.B.Lond., M.R.C.S.Eng., L.R.C.P. Lond., Medical Officer to the Post Office at Tenby.  
HAMILTON, ROBERT, M.D.Edin., Junior Assistant Medical Officer at Sunnyside Asylum, Montrose.  
MCKAIL, DAVID, M.D.Glasg., D.P.H., Lecturer on Hygiene to Nurses in Training in the Glasgow Royal Infirmary.  
MACKAY, D. MATHESON, M.D., C.M.Edin., M.R.C.S.Eng., L.R.C.P. Lond., Honorary Assistant Ophthalmic Surgeon to the Hull Royal Infirmary.  
MOLE, H. F., F.R.C.S.Eng., L.R.C.P.Lond., Surgeon to the Royal Infirmary, Bristol.  
SCALES, F. SHILLINGTON, B.C.Cantab., Honorary Medical Officer in Charge of the Electrical Department at Addenbrooke's Hospital, Cambridge.  
SMITH, G. MUNRO, L.R.C.P., M.R.C.S., Consulting Surgeon to the Royal Infirmary, Bristol.

## Vacancies.

Essex and Colchester Asylum, Brentwood.—Fourth Assistant Medical Officer. Salary £150 per annum and board. Applications to the Medical Superintendent.  
Rotherham Hospital and Dispensary.—Assistant House Surgeon. Salary £80 per annum, with rooms, commons, and washing. Applications to the Secretary, G. W. Roberts, 8, Moorgate Street, Rotherham.  
Royal Victoria Eye and Ear Hospital, Dublin.—House Surgeon. Salary £40, with board and residence. Applications to Edward Parker, Registrar (see advt.).  
The Manchester Northern Hospital for Women and Children, Park Place, Cheetham Hill Road.—House Surgeon. Salary £80 per annum, with apartments and board. Applications to Mr. Hubert Teague, Secretary, 38 Barton Arcade, Manchester.  
Norfolk and Norwich Hospital.—House Physician. Salary £80 per annum, with board, lodging, and washing. Applications to Frank Hasell, Secretary.  
Wolverhampton and Staffordshire General Hospital.—House Surgeon. Salary £80 per annum. Board, lodging, and laundry provided. Applications to J. S. Neil, House Governor and Secretary.  
Sunderland and Durham County Eye Infirmary, Sunderland.—House Surgeon. Salary £210 per annum. Applications to J. F. Potts, Secretary, Sunderland and Durham County Eye Infirmary, Stockton Road, Sunderland.  
Queen's Hospital for Children, Hackney Road, Bethnal Green, E.—Resident Medical Officer. Salary £100 per annum, with board, residence, and washing. Applications to the Secretary.  
Nottingham General Dispensary.—Two Assistant Resident Surgeons. Salary £160 each, with apartments, attendance, light, and fuel. Applications to C. Cheesman, Secretary, 12, Low Pavement, Nottingham.  
Staffordshire General Infirmary, Stafford.—Assistant House Surgeon. Salary £82 per annum, with board, residence and laundry. Applications to Richard Battle, Secretary.  
Brentry Certified Inebriate Reformatory, Westbury-on-Trym, Bristol.—Superintendent. Salary £300 per annum, with board and quarters. Applications to the Hon. Secretary, 34 Westbourne Gardens, London, W.

## Births.

BURTON-BROWN.—On August 17th, at Old Orchard, Iver, Bucks, the wife of Gerald Burton-Brown, M.D., Surgeon R.N., retired, of a daughter.

## Marriages.

MACKENZIE-RIGBY.—On August 18th, at the Parish Church, Blackburn, James Mackenzie, M.B., C.M., Colne, Lancashire, second son of Alexander Mackenzie, Esq., of Oromarty, N.B., to Marion, only daughter of the late George William Rigby, Esq., and youngest daughter of Mrs. Ann Rigby, of Blackburn.

MACKESSACK-COLEMAN.—On August 11th, at St. Clement's Church, Ourepipe, Mauritius, Major Peter Mackessack, R.A.M.C., eldest son of John Mackessack, of Kinloss, Torres, to Margaret, daughter of the late Alfred Coleman, F.R.C.S., and Mrs. Coleman, 9 Inverna Gardens, Kensington, London. (By cable.)

POWELL-PARISH.—On August 18th, at St. Augustine's, Edgbaston, George William Powell, B.A., M.B., fourth son of the late John Allman Powell, M.D., of Roscrea, Ireland, to Mabel Winifred, elder daughter of Henry Parish, of Bavelhill Edgbaston.

## Deaths.

TAYLOR.—On August 19th, suddenly of heart failure, Frederic Taylor, L.R.C.P., M.R.C.S., L.M., of 43 Beauchamp Road, S.W., formerly of Woodstock, Oxon, aged 78 years.

# THE MEDICAL PRESS AND CIRCULAR.

"SALUS POPULI SUPREMA LEX."

VOL. CXXXIX.

WEDNESDAY, SEPTEMBER 1, 1909.

No. 9.

## NOTES AND COMMENTS.

### The Dublin Hospitals.

THE Report of the Board of Superintendence of the Dublin Hospitals, which we summarise in another column, contains some points of special interest. The Board, in particular, draws attention to the fact that the out-patient departments have not kept pace with the wards in modern progress. This is entirely true, and the cause is, to some extent, the lack of funds. On the other hand, it is possible that the hospitals increase their own difficulties by attempting too much, and in wrong directions. They attempt too much in that they try to swell the number of those relieved without due regard to the question whether the relief could not have been given equally well by other agencies. There is no doubt that many of the patients attended in the out-patient rooms of the Dublin hospitals could have been attended equally well by private practitioners, whom they are quite able to pay. The function of an out-patient department should be to provide relief where difficulties of diagnosis or of treatment put cases outside the scope of the general practitioner. It is not, therefore, by treating a large number of cases of chronic bronchitis or of constipation that a hospital renders service to the community. It is rather by attending to cases which require either expensive apparatus for their treatment or specially expert knowledge. Yet we doubt if there is more than one of the Dublin hospitals which contains a properly-equipped department for carrying out vaccine treatment, and not all the general hospitals contain X-ray departments. Yet it is only by work of this sort that the out-patient department fulfils its function. The suggestion that by co-ordination more satisfactory results could be attained contains some truth, but until the hospital authorities come to a saner view of the proper scope of their activities, little real improvement can be expected.

### Hospital Grants in Dublin.

It has been the custom for many years for the Corporation of Dublin to make grants, amounting in all to a little over five thousand pounds, in aid of certain of the city hospitals. The money has been well spent, for the hospitals are, on the whole, economically managed, and it is hard to over-rate the services they render to the city. It would seem, however, that for some time past there has been a certain jealousy aroused by the fact that the hospitals do not limit admission to residents of the city, but that many of the patients come from a distance. We have no means of stating what proportion of the patients come from the country, but the percentage must, on the whole, be small. At any rate, there is no justification for the statement recently made in a

resolution proposed to the Corporation by Mr. Quaid, that "the City Hospitals receiving the said grants are practically of no benefit to the poor of Dublin, but are almost entirely for the advantage of country patients." This gentleman proposes to cut off all the grants to the city hospitals, but so far he has not succeeded in gaining the ear of the Corporation. The fact is that the public have got so accustomed to the voluntary hospitals undertaking work which would otherwise fall on the rates, that they hardly recognise any of the debt they owe to the hospitals. If the Dublin hospitals were to close their doors tomorrow, the expense thrown on the rates would be something very much more than the five thousand pounds at present coming from that source.

### The G.M.C. and Unqualified Practice.

DURING the past few years the General Medical Council has shown more evidence of its concern for the interests of the profession and the public than it had previously exhibited. This is a change we cordially welcome, for the General Medical Council possesses, outside the profession an influence no unofficial body can at present hope to equal, and while the General Medical Council remained inert or uninterested, one could hardly hope for reform from outside. Since the last meeting of the Council an important volume has been issued by its authority, giving a great deal of detailed information with regard to the laws regulating medical practice in other countries. We abstract some of the essentials in another column. It will come as a surprise to many to learn that in no less than eighty-two out of one hundred and eight countries of which information could be gathered, practice by unqualified persons is penalised by fine or imprisonment. In only twelve do conditions similar to those in the United Kingdom exist. This comparison brings clearly to our view how much behindhand in the protection of the public we are in these countries. Moreover, of the eighty-two countries which prohibit unqualified practice, no less than forty-one are under the British Crown. The colonies are therefore for the most part far in advance of the mother country, though it is true that some of the more important, such as some of the States of Australia, and also New Zealand are in much the same condition in this respect as the United Kingdom. The General Medical Council has

THE attention of readers is drawn to an important question put to the Home Secretary in the Commons by Captain Craig as to the sale of quack medicines. This is printed, together with the answer, on page 232 of the present issue.

performed a useful act in collecting and making available the information in this volume. We trust its activity will not cease at this point.

**Medical Men  
and  
Dispensing.**

At the recent British Pharmaceutical Conference in Newcastle-on-Tyne there was a discussion—in which some medical men took part—on the question “Should Dispensing of Medical Prescriptions be Confined to Pharmacists?” In reading through the speeches we find that the claim is being made that medical men should voluntarily give up—or be deprived of—the right to dispense their own medicines. To a certain extent we find ourselves in agreement with those who argued in this sense. The dispensing of medicines by medical men often occupies time which might be better spent, and it is usually insufficiently remunerated. On the other hand in many country districts there are no chemists and it becomes an absolute necessity in the public interest for medical men to dispense their own medicines. At any rate, it is absurd to suggest that there should be a law to prevent them doing so. Pharmacists must remember that their craft is not an independent one, but is auxiliary and subsidiary to the profession of medicine. As well might nurses meet and discuss whether, let us say, the making of beds or the administration of enemata—once, by the way, the function of the apothecary—should be confined to trained nurses. “Pharmacists,” says Mr. Tocher, who introduced the discussion, “are members of the only class in the Kingdom specially educated and properly trained to prepare and dispense medicines.” This might be said *mutatis mutandis*, with equal truth, of chauffeurs and the driving of motor-cars, but the chauffeurs have not yet suggested that medical men should not be permitted to drive their own cars.

**The Malvern  
“Hydro”  
Case.**

THE final stage in the now well-known Malvern “Hydro” case is the bankruptcy of Dr. J. C. Fergusson, the late proprietor. Readers will remember that in 1904 several visitors at the Hydro contracted typhoid fever, which, being attributed to the water supply, was considered to create a liability against Dr. Fergusson, which he settled by paying sums amounting to £6,500. In the meantime, the reputation of the Hydro had, of course, sustained much damage, and Dr. Fergusson claimed against the Malvern Urban District Council as the water authority for the neighbourhood. It was held that the water caused the outbreak, but the question of liability turned on the common law right of a predecessor of Dr. Fergusson to use a certain pipe for the conveyance of the water. The jury found in his favour, giving £7,500 damages against the District Council. Against this verdict the latter successfully appealed on the technical ground of the right to use the particular pipe, and the appeal was upheld in the House of Lords. The result was that Dr. Fergusson found himself saddled, not only with £6,500 in claims by the typhoid patients, but with £6,500 law costs of the Council, an almost exactly similar amount for his own costs, and over £1,000 costs of witnesses, besides having his once prosperous business as proprietor of the Hydro reduced to small proportions. The story is a sad one in the extreme, and we much sympathise with Dr. Fergusson. The jury evidently did the same, but the verdict was set aside on the technical point mentioned. We trust that his son, who is now carrying on the business, will be able to restore its popularity.

## LEADING ARTICLES.

### ENTOMOLOGY AND TROPICAL DISEASES.

ON Thursday last the Colonial Office made public the fact that a Committee had been appointed with the object of promoting the study of economic entomology, with special reference to Africa. Lord Cromer has consented to act as chairman, and the Committee consists of some twenty members, all leading scientific men, including Sir David Bruce, Sir Patrick Manson, and Sir John Macfadyen. The appointment of this Committee forms a sign of the times. It seems that the reproach which, up to late years, has justifiably been levelled at Government for neglect of science is now to be gradually, or speedily, removed, and that in future, whatever party be in power, the advice and help of men of science will be more and more sought in every direction in which it may be called for. To Lord Crewe, it appears, the credit for initiation of the present movement must be given, the establishment of the Committee being the outcome of a conference to which he invited a number of distinguished entomologists a few months ago. Members of the Committee give their services gratuitously; they have organised themselves into three sub-committees, each charged with a special division of the work. As every mere reader of current periodical literature is aware, our knowledge of the subject of the conveyance of disease by insects has enormously increased within the last few years. It has been demonstrated that such diseases in man as malaria, plague, sleeping sickness and yellow fever, are all conveyed by insects, whilst a long list of diseases in cattle and poultry have been traced to similar sources. Almost as much damage is done by insects that prey upon the crops, so that the future of Africa as a home for white men must depend very largely upon the destruction of these pests. Funds are to be provided by a grant from the Treasury, and contributions from the African Colonies most concerned in the work of the Committee. As might be expected, cordial offers of assistance have been made by the several schools of tropical medicine, and by the Universities, and help is confidently expected from workers in this branch of service in Egypt, the Sudan, and in South Africa. Mr. A. E. C. Parkinson, of the Colonial Office, is secretary to the Committee, and Mr. Guy A. K. Marshall has been appointed scientific secretary. Entomological experts are to be appointed and sent out to East and West Africa with the least possible delay, and it is confidently expected that these gentlemen will receive the assistance of colonial medical officers having full knowledge of the conditions that prevail in their respective localities. When we consider the truly wonderful practical results that have already been achieved by the application of scientific methods in stamping out disease caused by insects, we cannot doubt its ultimate triumph in the vast regions of savage Africa. We recently commented upon the remarkable results brought about under United States officials in Panama, one of the most recent

illustrations of the power of steadily-applied scientific methods. By these methods yellow fever has been done away with throughout the Tropics, and wherever they have been efficiently brought to bear, as in the Campagna, at Ismailia, and in many other widely-separated lands, intermittent fever has been virtually abolished. The tasks of preventive medicine in these directions, which until late years seemed impossible, are really becoming merely a question of expense, and as the outlay will lead to a return many millionfold greater, there should be no doubt about the provision of funds. Happily, in this instance, the encouragement and extension of colonisation and commerce will carry along with them the prevention of infinite human suffering, misery and waste of valuable life.

#### REPORT OF THE MIDWIVES COMMITTEE

WITH commendable promptitude, the Report of the Departmental Committee appointed by the Lord President of the Council at the end of last year to inquire into the working of the Midwives Act, has been issued. It is now six years since the formation of a Central Midwives' Board and the coming into operation of the Act. They were instituted to administer, and considering the curious policy which the members of the Board have followed, and dissatisfaction expressed in many quarters with regard to their decisions, the inquiry came none too early. In saying this, we must not be supposed to be criticising the actions of the medical members, who, on the whole, have acted with consistent dignity and restraint; unfortunately, the same cannot be said of all the lay members. The first conclusion arrived at by the Departmental Committee is one of satisfaction that the Act has worked so well, and has done so much to forward the objects aimed at. Praise, moreover, is given to the conduct of the Board, which is said to have been characterised "by judgment, prudence and sympathy," to which is added the curious statement that the Act has gained the good-will, not only of the local authorities, but, except in some instances, of the representative of the medical profession. On that last point we venture profoundly to differ from the Committee. No doubt the Act, in certain respects, marks an advance on the old haphazard and disgraceful methods prevalent among so-called midwives, but its fatal defect, which the Committee take no steps to remove, is that midwives' and midwifery practice among the poor are withdrawn entirely from the control of medical men. We have never been among those who believe that the midwife could be eliminated at one fell swoop from society, but while she exists it should be obvious to the meanest intellect that she is a person of severe limitations, and that so long as she continues to practice on her own account, those limitations will be constantly, nay, habitually, overstepped. Midwifery is a complicated science and a difficult art, organically connected with the practice of medicine and surgery, and every attempt to divorce from the province of medicine and to set up an independent order of practitioners, not only fails logically, but is bound

to fail in practice. Our own view, and we venture to say, the view of the profession generally, is not that the midwife should be a practitioner who calls in a medical man when she gets into a mess, but that she should be the assistant of a medical man, who is himself primarily and directly responsible for the conduct of each case. This view we shall never cease to hold, however much training may be insisted upon in the case of midwives. Training is all very well in its way, but no training of three months, six months, or a year will ever turn out a midwife competent to practice who is ignorant of anatomy, physiology, medicine and surgery. The Departmental Committee favour the retention of administrative powers in the hands of the County Council, and recommend that when dedication has taken place to district councils, such power should be withdrawn. As to the supply of midwives, the Committee take a roseate view, and they repudiate the suggestion that that part of the Act which comes into operation a year hence should be postponed. On the question of medical fees the Committee admit a real and substantial grievance as suffered by the profession. Figures were supplied by Dr. Howard Jones, Medical Officer of Health, Newport, Mon., showing that the practitioners in his district had attended an average of nearly twenty-eight patients each on the summons of midwives, many of them being difficult instrumental labours. In half of these no payment of any kind was made. In eleven per cent. small sums were paid, and in the remainder only was the proper fee forthcoming. One practitioner only received fees in twenty per cent. of the cases attended by him. The Committee recommend that in all cases the local Poor-law authority should be responsible for payment. It is something in these days when medical services are at a discount, except when required in emergencies, that even this amount of recognition should be accorded to them.

#### CURRENT TOPICS.

##### The Local Government Board and Food Supplies.

THE Local Government Board is an admirable institution; if it only had the real power of administration which its name suggests it might speedily bring about what is commonly termed a "millennium" in the national life, in so far as the public health is concerned. Unfortunately, the Board's functions begin and end in little more than compiling reports, pointing out defects, and recommending improvements. The duty of putting the laws in force lies with local authorities, and it depends entirely upon their intelligence and goodwill whether any part, and, if so, how much, of the admirable sanitary legislation which has been constructed during the past few decades shall be brought to bear in the respective districts wherein they exercise their powers. In many places the essential provisions of public health Acts are ignored; in many more they are administered with the utmost laxity; in comparatively few districts, whether urban or rural, is a continuous effort made to safeguard the health of the people by all the means available. The

fault lies upon the public. The majority of capable men, as a rule, decline to serve on local governing bodies, or even to take part in selecting and electing suitable candidates, and consequently there exists in many places no public opinion to influence the authority. Democratic institutions cannot be effectively worked under such conditions; in too many places they are lamentable failures. In these circumstances it seems a little doubtful whether the new department of the Local Government Board formed two years ago, and charged with the investigation of questions relating to the nature and quality of food supplies, will be able to achieve very much. It is not likely that authorities which cannot be induced to incur the expense involved in such simple, yet essential, matters as supervision of the milk supply, will provide the outlay needed for systematic examination and analysis throughout the whole field covered by the older Foods and Drugs Acts, and the Public Health (Regulations as to Food) Act, passed in 1907. This latter Act conferred new powers in regard to making regulations for the prevention of danger to public health arising from the preparation, storage and distribution of articles of food and drink. In the meantime, the Local Government Board has been conducting, through its own officers, inquiries in several directions. Dr. MacFadden has reported on the presence of lead and arsenic in imported tartaric acid used in the manufacture of beverages. Dr. Hammill has inquired into the adulteration and misdescription of vinegar. This is often merely a faked solution of citric acid, instead of the product derived from the brewing of malt worts. Dr. Buchanan and Dr. Schryver have reported on the use of food "preservatives." They have shown that these are often added to food or milk in such quantities as to cause danger to health; and they have proved that there goes on a large trade in meat and provisions in a state of incipient decomposition, the smell, staleness and putrefaction of which have been overcome by preparations such as formaldehyde.

#### The "Times" on Secret Remedies.

IN our issue a fortnight ago we noticed the recently-published Report of the British Medical Association on so-called secret remedies, quack nostrums which, when they contain any medicinal constituents at all—by no means always the case—yield up their secrets easily to the processes of analytical chemistry. We expressed the hope that the Report would be put before the newspaper Press in a manner that should compel the attention of editors and proprietors. Ignorance is the only excuse newspapers can allege for aiding and abetting a traffic which, as we have over and over again shown, is not only fraudulent but cruel and murderous; and the publication of the Report of the Australian Commission, followed now by the Report of the British Medical Association, takes away the power of any paper to put forward such an excuse. The *Times* sacrifices an income of thousands a year in closing its columns to a large class of puffs freely admitted into nearly every other paper, but it has recently shown itself far from as fastidious in this matter as it once was. Formerly—much more frequently than in late years

—it took occasion periodically to expose and denounce quackery, and to deplore "the enormous expenditure upon the quacks and quack medicines which undermines the health of so many victims, and which brings about the still greater evil of maintaining in prosperity and luxury some of the most complete and finished of the many imposters who are parasitic upon modern civilisation." In its Literary Supplement of Thursday last the *Times* thus briefly dismisses the British Medical Report:—"The British Medical Association has done a public service in publishing an exact statement of the cost and contents of all the most extensively advertised patent medicines. The prime cost of a bottle or box of pills rarely exceeds a fraction of a penny." The *Times* has missed an opportunity of forcing upon the attention of its contemporaries the facts with regard to this nefarious traffic with which members of its editorial staff have always been fully acquainted; but it is yet not too late to take the question up. The medical papers cannot, without the lay press, bring the facts before the public. The *Times* could do this alone with complete effect, and to do it, we are certain, would pay the leading journal in every sense of the word. Such a course would restore to the *Times* the prestige and respect which it has undoubtedly in late years to some extent forfeited, and it would yield to the proprietors the satisfaction of feeling that they had added one more to the large number of great benefits conferred upon the public by their renowned paper over a long series of years.

#### Dr. Hadwen on Malta Fever.

THAT distinguished physiologist, pathologist, anti-vivisectionist and anti-vaccinationist, Dr. Hadwen, has contributed a letter on Malta fever to the *Standard*. In it he speaks of his paper on the same subject in the *Contemporary Review* for August. We have not read that paper, nor do we propose to do so; the *Standard* letter is quite enough for us. Dr. Hadwen gives us to understand that the elaborate research, with its multiplied experiments, and control experiments, carried out by Sir David Bruce is entirely fallacious. Goat's milk has nothing to do with Malta fever, and the belief that Malta fever has been extinguished, in consequence of withdrawal of this milk as an article of diet by the garrison, is a pure delusion. The method of reasoning which has developed the delusion is neither logical nor scientific, but is full of fallacies and pitfalls. To say that Malta fever has been wiped out among the military and naval populations since imported condensed cow's milk has been substituted for goat's is mere special pleading. The fact is that, owing to the mental and moral obliquity which characterises the school of pathologists represented by Sir David Bruce, this school are now simply setting down the cases of so-called Malta fever—which Dr. Hadwen states is really not Malta fever at all, but only ordinary tropical fever—as simple continued fever. This is all very sad; it indicates a lamentable waste of force, and a position of stultification for Sir David Bruce and his colleagues. We doubt not that on receipt of the news of this pronouncement of Dr. Hadwen, Sir David Bruce will abandon his work in investigation of sleeping

sickness, on which he is now engaged, and will at once hurry home from Uganda, if only to make amends to Dr. Hadwen, and to avail himself of the knowledge and learning that he has evidently too long neglected. He will no doubt also relinquish his F.R.S. which was conferred upon him for his supposed discovery of the origin of Malta fever, and request Mr. Haldane to withdraw the thanks which, as Minister of War, he offered Sir David on behalf of the Government in the House of Commons for the services he had rendered in putting an end to a vast amount of human suffering, and saving at least two or three hundred thousand pounds annually to the national exchequer.

#### The Water Supply of London.

THE recently-issued Sixth Annual Report of the Metropolitan Water Board contains a mass of statistics in which only some few items are of interest to sanitarians. It is, however, satisfactory to note, first of all, the great advantage that has resulted from the consolidation of the numerous small independent authorities into one responsible body fully equipped for its duties. The main sources of water supply continue to be the rivers Thames and Lea, gravel beds in the Thames valley and at Hanworth, and natural springs and wells sunk in the chalk and other strata both north and south of the Thames. The total amount of water supplied during 1908-9 amounted to 81,823 million gallons, an average daily supply per head of population of 31.94 gallons. The storage reservoir capacity possessed by the Board amounts to 8,844 million gallons; this capacity is to be increased in time to 14,844 million gallons. The quality of the water is watched over by a Director of Water Examinations. The Report strongly emphasises the fact that the habitual use of stored water lightens the grave responsibility of the Board as regards the safety of the water supply, and tends to create a sense of security among those who watch over the health of the metropolis. The dissemination of water-borne diseases ought, at any rate, to be now much less possible than in the old days of haphazard methods and divided responsibility.

#### The Government Laboratory.

DR. THORPE, F.R.S., the principal chemist of the Government Laboratory, has just issued his Report for the year ended last March. It is a detailed statement of a truly stupendous amount of work, the gross total of the analyses carried out being 329,649. The work done for many Government departments, such as the Post Office, the Stationery Office, Trinity House and the War Office, however interesting to the citizen and taxpayer, does not specially concern the medical man and the sanitarian; it is in the matter of food and drugs that these most find interest. The examination of tea discloses a considerable percentage of packages as "unfit for consumption as food," and it is satisfactory to know that ample precautions are taken to prevent this from finding its way into the market. The Report makes plain the fact that the practice of adulteration does not prevail to any marked extent in the retail liquor traffic. The number of samples of beer adulterated,

or even watered, is really insignificant, whilst spirits, particularly whisky, were found almost universally free from added deleterious ingredients, although samples were taken from public houses, Irish fairs, and other such places where suspicion might most reasonably be excited. A year or two ago the danger to drinkers owing to the presence in beer of glucose adulterated with arsenic was fully exposed. It is satisfactory to be assured by Dr. Thorpe's Report that this danger has now virtually ceased to exist. Out of fifty-five samples analysed only thirty were found to contain arsenic in excess of the hundredth of a grain per pound. This was the quantity named as a limit in the Royal Commission on Arsenical Poisoning, upon whose Report we commented soon after its appearance a year or so ago.

### PERSONAL.

THE name of Dr. E. Arthur Dando has been placed on the Commission of the Peace for the Borough of Dudley.

LIEUT.-COLONEL R. J. S. SIMPSON, Royal Army Medical Corps, has taken up his duties as Medical Officer for the London District.

DR. ADAM WRIGHT, of Toronto, has been elected President of the Dominion of Canada Medical Association.

WE regret to record the death of Mr. S. G. Lushington, who has been for some years legal assessor to the General Medical Council.

LORD CROMER has been appointed by the Secretary of State for the Colonies to be Chairman of the New African Entomological Research Committee.

PROFESSOR WALKHOFF, Professor of Dental Surgery in the University of Munich, was president of the Fifth International Dental Congress, held in Berlin last week.

AT Winnipeg, on August 25th, Sir J. J. Thomson, F.R.S., was installed as president of the British Association for the Advancement of Science, in succession to Dr. Francis Darwin.

SIR HENRY BURDETT has started on a tour of inspection of the principal English Hospitals this week. Having been actively engaged in hospital work for upwards of forty years, his present effort possesses special interest and importance.

DR. R. A. PRICHARD, of Conway, North Wales, who has filled the office of Mayor of Conway six times, was last week presented with a Sunbeam 14-18-horse power motor landaulette, as a mark of the esteem in which he is held both professionally and by the public in the district in which he has long resided.

A FATAL accident occurred last Thursday at Sparkhill, Birmingham, whereby Dr. Dalrymple, who was at the time acting as *locum tenens* for Dr. Tipping, was killed in a tramway collision. The victim of this unfortunate mishap was about 25 years of age, and had only recently qualified.

SIR ALFRED JONES, K.C.M.G., Chairman of the Liverpool School of Tropical Medicine, with a view to extending the scope of the school, and of bringing it into still closer practical touch with the Tropics, has decided to appoint a medical officer to carry out the study of tropical medicine at Las Palmas, Grand Canary.



# A CLINICAL LECTURE

## ON

### FEEBLE-MINDED CHILDREN. (a)

By A. F. TREDGOLD, L.R.C.P.Lond., M.R.C.S.Eng.,

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#### PART II.

WE now come to the clinical features of these children, and I will first of all describe cases of primary feeble-mindedness. As I have remarked, these are by far the most numerous, and probably eight or nine-tenths of all feeble-minded children met with in practice fall within this group.

These children differ very much in the degree of their deficiency. The lower members of the class are with difficulty separated from the imbeciles. The higher members, on the other hand, are in some ways but little removed from the dull and backward of the normal population. It is clear, therefore, that no general description can be given which will be applicable to every feeble-minded child, but I will endeavour to place before you the chief characteristics of the class.

With regard to their physical condition, a small number might fairly pass as normal, but such cases are exceptional, and the majority present unmistakable anomalies of bodily structure or function, as well as of mental development. Bearing in mind that their condition is the result of a germinal imperfection, this, of course, is what we might expect.

Anatomical anomalies, or so-called stigmata of degeneracy, are usually neither so plentiful nor so pronounced in the feeble-minded child as in the imbecile or idiot; nevertheless, they occur in over 90 per cent. of these cases, and in nearly a quarter of the cases these defects are triple.

One of the commonest anomalies concerns the cranium, which is either abnormal in shape or size, being bossed, ridged, or asymmetrical in fully half of these children. Between the ages of seven and ten years, the maximum circumference is generally about half-an-inch less than that of a normal child of corresponding age and sex, but as time goes on this discrepancy becomes more and more marked, and by the 14th or 16th year the difference is often as much as an inch. Next in frequency to the cranium we find anomalies of the palate, and then malformations of the external ear and eye.

Inquiries will nearly always show that in these children, dentition, standing, walking, and talking have been abnormally late. It may be 4, 5, or even 6 years before the child says a word. This retardation continues with advance in years, so that at every period of its school life the mentally defective child compares unfavourably in its bodily growth and acquirements with the one of normal intellect. Further, the bodily functions are often imperfectly performed, the circulation is feeble, so that chilblains and sores are frequent in cold weather; assimilation is defective, so that the child remains thin and ill-nourished; the vitality generally is diminished, and catarrhs and ill-health are exceedingly common. Feeble-minded children average 2 to 4 in. less in height, and from 3 to 12 lb. less in weight, than normal children.

Another frequent characteristic of these children is seen in various anomalies of nerve action. In some there is a marked diminution of activity, and they are heavy, stolid, and laboured in all their movements. In others the reverse is the case, and all movement is in excess. These latter cannot sit or stand still, they are distracted from their task by every little thing around them, and they are often full of tricks and habits. Co-ordination of movement is slowly and laboriously acquired, and the making of pothooks and

hangers presents difficulties unknown to the ordinary child.

Speech is not only late in making its appearance, it is also defective in fully one-third of these children. It may be remarked that inability to pronounce, not one particular, but many consonants, is very commonly indicative of mental deficiency.

With regard to their mental condition: Sensory defects are not a prominent feature of the feeble-minded degree of amentia. Defects of hearing (which are generally due to disease of the middle ear) occur in about 8 per cent., and defects of vision in about 15 per cent. of cases. Colour blindness, although in many cases seemingly present, is not in reality any more common than in normal children.

Active or voluntary attention is commonly defective, and the most trifling thing serves to distract these pupils from their occupation, so that, even where the attention is readily gained, it is with difficulty held.

Memory is often said to be defective, but I think that in many cases this arises from a defective comprehension. In the tenacity of the memory for things which are really understood, I doubt whether feeble-minded are much, if any, inferior to normal children. As a class they are imitators rather than originators; they are defective in control, and action is more often the result of sudden desires and impulses than of any deliberate purpose. They are capable of the simple feelings of pleasure, pain, fear, astonishment, anger, surprise, and the like, but their emotions are usually weak and evanescent.

All of them are lacking in the logical, and most of them in the æsthetic, sense. In a small proportion there is also a marked deficiency or perversion of the moral sense, and such will lie, pilfer, and generally misconduct themselves without the slightest compunction. Some of them are exceedingly cunning, and a few are guilty of acts of marked cruelty to other children or to dumb animals. Others will make utterly unfounded accusations with such an amount of detail and appearance of truth that the unwary may easily be deceived. On the other hand, there are many who are quite well-behaved, obedient, and contented, and who even possess a tolerable conception of their moral and religious obligations.

So far we have been concerned with the primary group of feeble-mindedness, in which the defect is due to germinal imperfections. It is now necessary to consider that much smaller but very important group of cases of secondary amentia, in which the growth of the brain has been arrested by some external influence. These external factors are many and varied, and I think they are most conveniently considered at the three periods of before, during, and after birth.

The cause which brings about arrest of cerebral development whilst the child is still within the uterus is usually a circulating toxine, such as lead or alcohol. Occasionally, however, starvation or severe ill-health of the mother during the child-bearing period may apparently lead to the same result. It has also been suggested that ebolics may act in a similar way, but of this I have no experience, and, as a matter of fact, in my opinion the number of cases of feeble-mindedness which are the result of causes acting upon the foetus is exceedingly small. Maternal impressions are often put forward as causes by the parents, but I must confess that I have never seen a case where such an allegation would bear investigation.

Feeble-mindedness may occasionally arise from

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injury inflicted upon the brain during birth, and this injury is usually the result of asphyxia or destruction of cortical tissue by hæmorrhage. I have never seen a case of mental defect caused by the forceps, and, although I know some authors maintain the contrary view, I doubt whether feeble-mindedness has ever resulted from the proper application of these instruments.

Cases which owe their origin to labour are not very numerous, but they form a fairly characteristic class, and it is very important for the practitioner to remember that mental defect may arise in this way.

Thirdly, after birth, feeble-mindedness may be the consequence of a localised arrest of cortical development which has been caused by disease. This disease may be one of the ordinary acute infections, such as scarlet fever, measles, diphtheria, or whooping-cough, or it may be a special condition to which I will allude in a moment.

For purposes of description we may divide these secondary cases of feeble-mindedness into two groups, which we may call the vascular and toxic.

The best example of the vascular group is seen in those cases which are due to injury during birth, and the clinical picture is usually like this:—

In the first place, there is generally a well-marked history of asphyxia, or some comatose condition, from which the child was with great difficulty revived. But he remains torpid, and his respiration is apt to be slow and irregular, and his pulse feeble. The pupils may be contracted, and the anterior fontanelle is often tense. He does not cry, and evinces little interest in the breast. In a few days convulsions usually make their appearance, but in between these the muscles may remain rigid, and opisthotonos may even be present. At a somewhat later period paralysis may be noticed. Sitting up, walking, and first attempts at speech are all delayed, and after a time it is seen that the child's behaviour is not quite the same as other children. Sometimes mental deficiency is not noticed until schooling is begun, when the child is found to be incapable of any mental effort.

There can be no doubt that a large proportion of such children die in the early years of life, but others thrive and live for many years, and it is these who come under notice on account of their mental condition. The chief features are more or less defect of mind, with usually some paralysis and imperfect development of the lower limbs. Stigmata of degeneracy are absent, and these children, as well as those of the next group, are usually quite devoid of the unpleasing and even repulsive appearance of those suffering from primary mental deficiency.

In the toxic group the cause may be, as I have stated, almost any one of the acute infectious diseases of childhood, and the involvement of the brain is either by a general toxæmia or by extension of a septic process from the ear or nose. More commonly, however, feeble-mindedness after birth is due to a specific poisoning of the cortical cells, a condition which was first described by Strümpell, and which is known as poli-encephalitis acuta. The process is probably very similar to the poisoning of the anterior horn cells which occurs in anterior polio-myelitis. I have seen several cases of this nature, and they are very commonly mistaken for sunstroke or meningitis.

The first indication of such an affection of the brain is often malaise or vomiting, and this is followed by restless delirium or unconsciousness, fever, convulsions, and often paralysis. The temperature rarely rises to more than 102° F. Paralysis may be noticed at the outset, or it may not appear until a few days afterwards, and in some cases it is absent entirely. The reflexes are increased, but there is rarely any marked disturbance of sensation. In course of time the fever abates, the convulsions cease, or continue only at rare intervals, the child recovers consciousness, and some amount of improvement takes place in the paralysis. But the psychic functions have been damaged; in some cases an obvious impairment of the intellect is noticed immediately, in others only as the child begins to get about and mix with his companions. If he had begun to speak, he may now be

speechless. The playmates and games of which he was formerly fond now cease to attract him, and, in short, there is a marked alteration in his whole disposition and behaviour. As time passes it is found that his capacity for learning has been interfered with, and it is soon evident that the illness has resulted in a more or less serious arrest of mental development.

In view of the widely different ultimate effects of these cerebral lesions, it is obvious that no accurate forecast is possible. It is probably only a minority of the children so affected who become aments, but this possibility can never with certainty be excluded until the lapse of some time after the illness. Paralysis affords a very uncertain guide, for there may be extensive hemiplegia with no intellectual defect, and there may be profound amentia with but trifling or even no paralysis at all. And even if one could definitely exclude all involvement of the psychic areas, there would still be the possibility of recurrent epilepsy, with the consequent induction of amentia.

Such, gentlemen, are the chief characteristics of feeble-minded children. Here, however, let me emphasise the fact that they differ amongst themselves just as much as do ordinary children. Not only do they vary greatly in the degree of their intelligence, but also in their habits, temperament, and general disposition. In fact, they possess an individuality, and methods of treatment and training, to be successful, must be based upon a study of each particular child.

But, whatever the particular features may be, there is one quality which characterises all the varieties and grades of these children, and that is their inability to swim against the stream, or even to keep their heads above water without the assistance of some kindly hand. Whilst the ordinary child of 14 or 16 years has not only a considerable knowledge of common things and events, but has, in addition, acquired notions of qualities and conceptions of the abstract; whilst he has developed the faculty of comparing, relating, and judging between these conceptions, and of tracing a connection between cause and effect; whilst his mind is now sufficiently developed to enable him to shape a definite course in accordance with an ideal—the feeble-minded child of similar age is still happy with his toys, and his whole behaviour and conversation still indicate the infantile and imperfect character of his mind. Bodily and mentally he is always in arrears, and with each advancing year his intellect is left further and further behind that of his more fortunate fellow.

We must now briefly consider the question of diagnosis.

As you are well aware, there are some diseases which, if we only give them time, diagnose themselves. Unfortunately, however, when this time is arrived at, the patient has often passed beyond the possibility of medical aid. This is the case with feeble-mindedness. Do not, let me beseech you, content yourselves or try to content the child's parents by saying that he will "grow out of it," or that "he will be all right when he is 7," or "14," or "21."

By so doing we are neglecting training at the only period when it is likely to be of any use, and we are almost certainly driving the child into the hands of unscrupulous practitioners or quacks. I have known scores of pounds spent upon the performance of useless operations, drugs, and all sorts of magnetic and galvanic appliances, whilst systematic training, the only thing which could do the child any real good, was absolutely neglected. The result is that the child grows up, not only much more defective than he need be, but the possessor of habits and propensities which are a lifelong trouble and anxiety to all about him.

In these cases early training is essential, and therefore a diagnosis at the earliest possible moment is of prime importance.

Now, the diagnosis of idiocy and imbecility is easy, but the diagnosis of the milder defect—feeble-mindedness—may be a matter of considerable difficulty. Much skill and knowledge are required, which can only be obtained by close observation of the class; but I will try to place before you the chief points to be considered.

First of all, it is necessary to avoid the fallacy that

feeble-mindedness is merely a falling short of the normal. I have known several medical inspectors of school children to set up what they call a normal standard of intelligence, and then to class as defective all those who fell short of it. The result of this is that many children are stigmatised as defective who are not so at all. Feeble-mindedness is this, certainly, but it is something more; it is the result of a definite cerebral lesion, of an imperfect or arrested development of cortical cells, and the diagnosis must depend upon finding evidence of this defect.

When, therefore, the physician is consulted with regard to a child, in whom, by reason of mental dulness or inability to progress in school, the suspicion of mental defect arises, he must make a careful examination of each psychological function, and, having discovered a definite mental flaw, he must consider whether this is of such a nature as to account for the dulness and to lead to some permanent mental incapacity.

To enter at any length into this subject would take us too far into the intricacies of psychology, but I may say that careful examination of the feeble-minded child will generally reveal some lessened range or acuity of perception, some paucity of association or memory, some defect of voluntary attention, or of ideation, or of the judgment and will. Such an examination is, perhaps, not at first easy, but with a little care and patience it soon becomes so.

There are two other points which are of material assistance in the matter of diagnosis—firstly, the family history, and, secondly, the personal history.

With regard to the family history, morbid heredity occurs in such a large proportion of these cases that if, in a child of sub-normal intelligence, we find a strongly marked psychopathic taint, the probability of mental defect is greatly increased. On the other hand, a clean and good family history is of value as indicating rather that the mental dulness may be the result of some temporary condition or physical disease.

Secondly, the previous personal history often affords most valuable information. In cases of primary amnesia it will nearly always be found that a general retardation of development, with mental dulness or marked peculiarity, has been present from soon after birth. In infants with a psychopathic heredity, marked and persistent restlessness, which cannot be accounted for by bodily ill-health, is a very suspicious symptom. So also is abnormal placidity and indifference to surroundings, although the mother is apt to look upon this as merely an excessive amount of goodness.

With regard to the time at which the child cuts its teeth, or first sits up, or walks, or talks, it is, of course, obvious that delay in any one of these things is of little importance, for the range of normal variation is very considerable, but delay in several of them, provided there is an absence of bodily disease such as rickets, must be regarded as very suspicious.

In secondary amnesia, on the other hand, inquiries will nearly always reveal a clear history of some serious toxic or vascular lesion of the brain or of epilepsy, previous to which the child's condition has been normal.

Finally, it is necessary that I should say a few words with regard to some conditions which so closely simulate feeble-mindedness that they are often mistaken for this condition.

Perhaps the commonest mistake is with regard to children who are merely dull and backward. These are found in all schools, and vary from 5 to 20 per cent. of the children in attendance. It is sometimes very difficult to distinguish them, but I think that attention to the points I have just mentioned will generally prevent a mistake.

Next, there is another group of children whose development is not arrested, but merely delayed. Usually these are the result of insufficient or improper feeding and general home neglect, and if the conditions are known to exist, the examiner will be wise to withhold a definite diagnosis until the child's general condition has been improved by suitable treatment.

Another point which it is important to remember is that defects of vision, hearing, speech, or serious constitutional disease often make a child dull and stupid, and cause him to appear defective. I have had boys and girls produced by school teachers as cases of feeble-mindedness who merely wanted the attention of the oculist or nose and throat specialist, and I have seen a boy returned as defective who was mentally sound, but suffering from pulmonary tuberculosis.

Finally, nervous exhaustion due to overwork, epilepsy, and even insanity, may all be confused with feeble-mindedness, and these conditions, as well as the physical disorders which I have just mentioned, must be excluded before a diagnosis can be made.

There are many other points with regard to feeble-minded children to which I might allude, but time does not permit, and I think I have mentioned all those of importance. I can only hope that this brief account of a somewhat intricate subject may be of some use to you in daily practice.

## ORIGINAL PAPERS.

### A CHAT ABOUT

## ANTIGENS, ANTIBODIES AND THE FIXATION REACTION OR DEVIATION OF THE COMPLEMENT.

### BASED ON NOTES

By PROFESSOR CHANTEMESSE, M.D.,

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[ESPECIALLY ADAPTED FOR THE MEDICAL PRESS  
AND CIRCULAR BY F. HELME, M.D.]

RECENT advances in our knowledge of the defensive action of the blood and humours have led to the introduction of many terms which are necessarily unfamiliar to practitioners at large, so that it may not be inopportune to endeavour to explain in an informal manner in what these theories consist. These theories are independent of phagocytosis, they bear, indeed on an entirely different defensive apparatus, one, too, that is singularly difficult to explain.

The phenomena in question are simple enough, it is the terminology that renders them unintelligible. The actual nature of the active constituents of serum being unknown each observer looks at them from his own point of view, and deals with them accordingly, giving rise, inevitably, to confusion worse confounded—a confusion which will only be dissipated when the theories have had time to "shake down." Meanwhile, if we wish to keep abreast of the movement, there is nothing for it but to try and understand these terms.

A foreign substance that penetrates the organism and gives rise to reactionary phenomena used to be called a virus. This term, however, is not comprehensive enough, so that it became necessary to make use of such complementary terms as toxins, etc. This did not give rise to much trouble, because everyone is familiar with the meaning of these terms; but every substance, whatever its nature, introduced into the blood, provokes a defensive reaction, whether it be a micro-organism or its secretions, a chemical substance or a virus, a blood corpuscle just as well as a microbe. A word was, therefore, required which should comprise all these bodies without prejudging their nature, so the word *antigen* was created. Antigen is synonymous with virus, microbe, etc., over which it has the advantage of being more comprehensive, less

-specific so to speak. Then, too, and this is important to bear in mind, it implies the formation in the humours, after inoculation, of special agents of defence, the latter being termed *antibodies*.

Since the antigen, when introduced into the blood of man, gives rise to the production of an antibody, it is necessary for us to ascertain what the latter is. Now the antibody is like the little scholar's definition of a point, *viz.*: something that does not exist. Well, it does exist, but only to the eye of reason, for it has never been seen or handled. All we can say is that it is formed by the blood for the defence of the organism and that it consists of two bodies—as is shown by the action of heat. One of these two bodies is thermolabile, *i.e.*, is destroyed by a temperature of  $55^{\circ}\text{C}$ ., so that it can easily be got rid of by heating the serum or the liquid containing the substance with the antibody. This particular substance is called *alexine*—a word to be remembered. It is not specific, that is to say, it is present in the serum of every animal, healthy or diseased. It is also sometimes called the *complement* because it supplements or completes the action of the second body which is the *sensitiser*.

The sensitiser is thermostabile, it resists a temperature of  $55^{\circ}\text{C}$ ., and is only destroyed by temperatures above  $75^{\circ}\text{C}$ . Unfortunately, this body is known under several different names, and this is what makes the question so difficult to understand; it is called, for instance, agglutinine, precipitine, sensitiser, or amboceptor. The two words to be particularly borne in mind are *sensitiser* and *amboceptor*. The former, introduced by Bordet, is of Belgian origin, the latter, imagined by Ehrlich, is of German origin.

In short, antigen gives rise to antibodies within the organism, and the latter are made up of two parts which can be distinguished one from the other by their reaction to heat; one, non-specific, common to every serum, is killed at  $55^{\circ}\text{C}$ ., this is *alexine* or the *complement*; the other, more robust, resists a temperature of  $55^{\circ}$ . This is frankly specific, that is to say, it is peculiar to the individual antigen, it only acts upon one cell, one particular microbe, a blood corpuscle of a given species, to the exclusion of all others. This substance, the so-called sensitiser, is also known as *amboceptor* and *agglutinine*, though the latter term, while currently employed, is possessed of less importance.

It may be objected that these are all highly technical details, quite devoid of interest to the general practitioner, but this is not so. Let us assume that you have a patient whom you suspect of having had syphilis, although there is nothing in his personal history or in the objective signs to confirm that suspicion and justify your instituting the anti-syphilitic treatment. Well, thanks to the reactions of the sensitiser and the alexine, you will be enabled to demonstrate the existence of the syphilitic taint with mathematical certainty. This reaction is called the *fixation test* or the *deviation of the complement* (also known as Wassermann's test from the name of the discoverer). We will now explain this test.

Proceeding in accordance with the data given above, let us institute a preliminary conclusive test. A guinea-pig is inoculated several times over with thoroughly defibrinated red corpuscles of the rabbit (a different species to the guinea-

pig). The blood of the guinea-pig brought face to face with the invader forthwith sets to work to organise its defence by producing an antibody, the rabbit corpuscles having in this case acted the part of an antigen. So far everything is clear enough.

But it has been pointed out that the antibody consists of two substances, one, alexine, common to every serum; the other, specific, the sensitiser. Now, every time the sensitised guinea-pig blood is brought into contact with rabbit's blood, even *in vitro*, hæmolysis takes place with breaking up of the rabbit corpuscles. This phenomenon is due to the following mechanism—a mere hypothesis it is true, but one which concords with the facts.

Of the two substances contained in the antibody one, the sensitiser, acts the part of a mordant; it impregnates the rabbit corpuscles which are thus rendered mordant, and become amenable to the complementary action of the alexine or complement. Ehrlich applied the term amboceptor to the sensitiser, because it serves as a bridge, as a point of contact, between the corpuscle on the one hand and the alexine on the other. A glance at the accompanying diagram will make it easy to understand the employment of the word amboceptor.

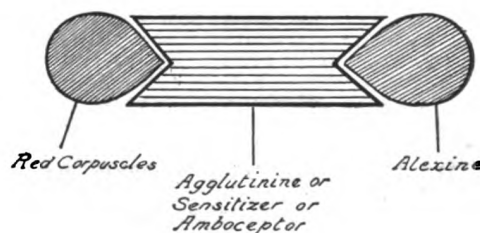


FIG. I.

The point to be remembered in this experiment is, that if we wish to act upon any invader: microbe, virus, corpuscles, described generically by the word antigen, the antibody requires both its constituent parts. The sensitiser, likened to a mordant, and the alexine, which completes the work of the former. *But one cannot act without the other.*

Having grasped this much we will now discuss the steps to apply Wassermann's test, that is to say, to ascertain by simple inspection of the patient's blood whether or not he is syphilitic. (1) Since the treponeme, the infective agent of syphilis, has not so far been obtained in pure culture we take a piece of liver from a newly-born syphilitic infant, a supply of which is to be had in every laboratory. This is pounded and mixed in tube A, with a little sterilised water. This bit of liver is merely a *milieu* rich in treponemes.

(2) In tube B we place a small quantity of the serum from the patient supposed to be syphilitic. If this be the case the serum will contain both a sensitiser peculiar to the treponeme and an ordinary alexine; in the contrary event *only alexine will be present*.

(3) In a third tube C is some guinea-pig serum, sensitised (or immunised), as already explained, against rabbit blood. This, however, is heated to  $55^{\circ}\text{C}$ ., in order to destroy the alexine so that the sensitiser alone remains.

(4) Lastly, in a fourth tube D are put the

thoroughly washed defibrinated corpuscles from the rabbit blood.

We now mix the contents of tubes A and B, then adding the contents of tubes C and D,

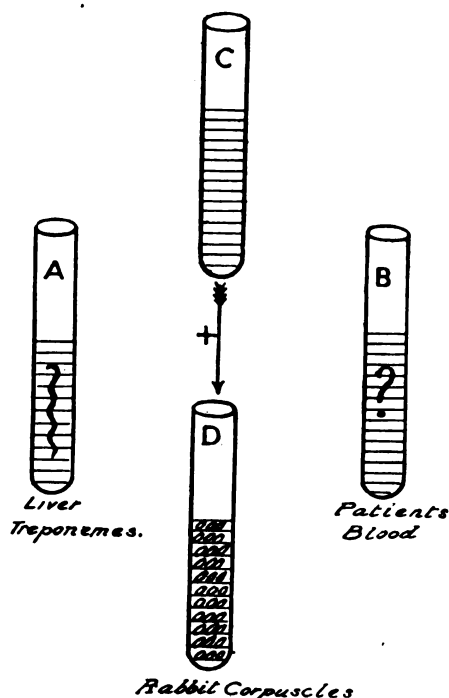


FIG. II.

FIG. II.—The patient being syphilitic his serum, containing a complete antibody (alexine and sensitiser), attacks the treponemes in the syphilitic infant's liver, and nothing happens in tubes C and D.

placing the mixture in the warm chamber for two hours. If there be syphilis it will be seen that the rabbit corpuscles remain intact and this amounts to negative result from the point of view of the experiment since no change has taken place in the liquid, but it is a positive result from a diagnostic point of view. *i.e.*, the patient is certainly syphilitic.

Now what has taken place? Simply this, that the patient's blood having been sensitised to the treponeme (by his infection), the antibody attacks it, the sensitiser performs its duty as a mordant, the alexine completes the task and we get treponemolysis, a breaking up of the treponemes. The corpuscles in tube D have not been attacked by the serum of tube C because the latter only contained the sensitiser without alexine, and, as has been pointed out, these two bodies can only act in conjunction.

We will now assume that the patient is not syphilitic. Returning to the four tubes I mix as before the contents of tube A, containing the treponeme liver, with that of tube B, containing the patient's serum. To this mixture I further add the contents of tubes C and D, the latter containing the washed red rabbit corpuscles, the other the guinea-pig serum deprived of its alexine by heat. The whole is placed in the warm chamber for two hours whereupon, in opposition to what took place at the other test, the liquid becomes red and turbid. What then has happened on this occasion?

The patient not being under the empire of syphilis his blood has no action on the treponeme. But although this blood contains no antibody properly so-called, it nevertheless contains alexine, which is common to all serums. Now the latter remains free to act since it is not taken up with the treponeme, so it goes to complete the action of the sensitiser contained in tube C. The two substances being thus combined act the part of a complete antibody towards the corpuscles of rabbit, so there is hæmolysis instead of treponemolysis as on the previous occasion. In other words, the sensitiser has caused the alexine complement free in the patient's blood to deviate, it has *fixed* this complement alexine in the rabbit corpuscles, whence the terms fixation test, deviation of the complement, employed in describing Wassermann's test.

If, instead of the treponeme, I had made use of any other pathogenic microbe, the typhoid bacillus for instance, the reaction would have taken place just in the same way.

Going a step further Drs. Levaditi and Auguste Marie of Villejuif have endeavoured to make use of cerebro-spinal fluid instead of serum. It occurred to them that possibly Wassermann's reaction might answer the purpose of demonstrating the syphilitic origin of general paralysis of the insane. Having put this to the test they found

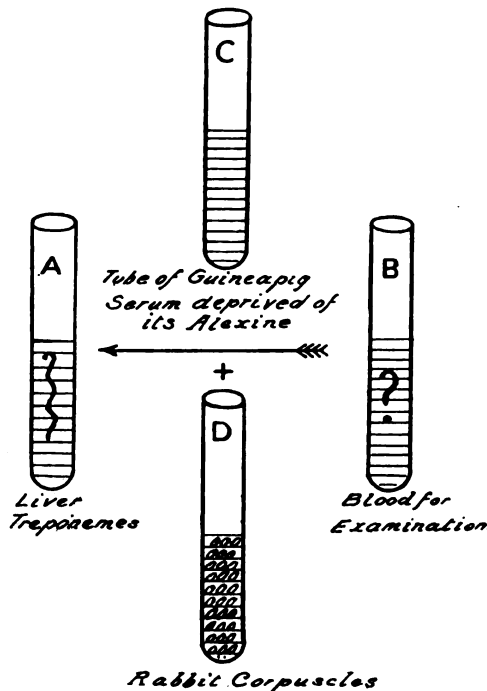


FIG. III.

FIG. III.—The patient is not syphilitic. The natural alexine of the patient's serum is left free. It is deviated to the sensitiser of tube C, deprived of alexine by heating to 55° C. When this adjunction takes place the antibody, thus completed, has attacked the rabbit corpuscles and hæmolysis, visible to the naked eye, results. To simplify matters, since it is only a diagram, the corpuscles are left intact, though in reality they have been broken up.

that the reaction was the more obvious the more advanced was the specific lesion. We all know



that there are cases in which mercury appears to improve matters, while in others it aggravates them. How are we to know whether the mercurial treatment has not in some way hindered in the latter the action of the antibody then in course of formation, consequently are we not entitled to hope that this reaction when simplified and improved may provide us with a sure and safe guide to the desirability of the treatment?

I will stop here. I have done my best to make this subject clear to my readers, and am satisfied that my narrative will be found less tedious to read than it was to write.

### VISCERAL SYPHILIS. (a)

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Clinical Medicine in the University of Liverpool.

THE late Dr. Hilton Fagge, in his great work on medicine, says that three diseases are often missed—phthisis, scabies and syphilis; phthisis because it is not looked for, scabies because it is overlooked, and syphilis because it is forgotten. Mr. Hutchinson, in a recent address on syphilis, said he considered that the disease was both less frequent and less severe than formerly. We shall probably all agree that it is less severe, but it may well be questioned whether it is less frequent. Mr. Hutchinson takes an optimistic view of the value of treatment, and maintains that syphilis is a disease which is strictly curable. Sir Wm. Gowers, dealing perhaps more specifically with later effects, regards the doctrine of the curability of syphilis with some suspicion. Certainly, nothing tends more to support the view than the mysterious way in which tabes and general paralysis sometimes appear—diseases which, constantly accumulating evidence tends to show, have as an almost constant antecedent a history of syphilis. Syphilis, thus, is readily forgotten by the patient. The chancre may disappear and leave no trace. On the authority of Mr. Hutchinson, we may even say that in certain cases it does not form at all; the ordinary secondary signs may be slight, or even absent; and the activity of the virus, working in unobserved secrecy, may only be revealed by the appearance of visceral symptoms. Sir Wm. Gowers would almost lead one to accept as a rule that certainty of absence of exposure to contamination is the only assurance one should accept from a patient. I shall relate some cases to you which show how much more reliance we ought to place upon the certain facts of pathology than upon the patient's or on even our own disposition to believe that syphilis can be excluded.

I have ventured upon these introductory remarks because experience has taught me how valuable is the *obiter dictum* of Dr. Fagge. Syphilis, undoubtedly, is most frequently met with in the central nervous system; probably next, its effects are manifested in the diseases of the great thoracic blood-vessels, the aortic valves, and the heart. Of the abdominal viscera, the liver is the organ in which the disease assumes great clinical importance, whilst syphilis of the respiratory system, excluding the larynx, is extremely rare. I shall ask your kind attention only to such aspects of this large subject as are familiar to me from personal experience, and only touch upon rarer manifestations of the disease.

*Syphilis of the Abdominal Viscera.*—I find that, of my last 1,000 hospital cases, 30 suffered from gross disease of the liver, cancer, cirrhosis, and perihepatitis chiefly, and that they include 4 cases which were certainly known to be syphilitic. The disease is not, therefore, very frequent, but the importance of a correct differential diagnosis is great, for if the specific new formed cellular tissue has not been replaced by fibrous tissue a complete cure may be obtained. Lardaceous disease, the result of syphilis, is now much

rarer than it used to be; and the presence of associated symptoms indicating a similar disease in the kidneys, spleen, or intestines will make the diagnosis easy. It is from the three diseases I have just mentioned that the diagnosis has chiefly to be made. One of my cases resembled malignant disease in so many ways that the real state of affairs was unfortunately not suspected. A woman, æt. 56, had for nine months complained of severe abdominal pain and tenderness on the left hypochondriac region. She was obviously ill, though not particularly cachectic. On examination of the belly, an ill-defined swelling was felt in the left flank and the liver was just palpable. There was no jaundice and no ascites. The bowels were most constipated; but, under repeated enemata, the pain disappeared, and the swelling in the left of the abdomen greatly diminished.

The patient now left the hospital, but returned in a few months, greatly changed for the worse. She looked very ill and cachectic, the abdominal pain had increased greatly, and also now radiated down the left thigh. A distinct hard mass could be felt in the left hypochondrium, and the liver was large, perhaps the left lobe more than the right; there was moderate ascites, which was three times removed; jaundice was still absent. Here the age and sex of the patient, her general appearance, the violent pains and the abdominal tumours, seemed to be a typical picture of cancer, and no specific treatment was adopted.

The *post-mortem* showed that the liver had the characteristic irregular shape due to gummatous formation, the right lobe was small, contracted by the cicatrices of a gumma, the left enlarged, and showed a large gumma at its juncture with the right lobe; there was also an enlarged spleen, and some chronic perihepatitis and perisplenitis. I now think I failed to lay proper stress upon the following points:—The liver in cancer is usually very large; new growths cause the largest of liver swellings, in syphilis there is often a peculiar one-lobed enlargement; jaundice is hardly ever a symptom of syphilis; it is present in 50 per cent. of cancer cases. The duration of cancer, when once the liver is found to be large, is very short; in none of my cases has the patient survived over eight months. In syphilis the liver tumour may exist for many months. Definite, knobby, umbilicated masses felt on the rapidly enlarging liver are amongst the strongest facts indicating the real malignant nature of the disease.

Two other cases successfully treated resembled portal cirrhosis or simple chronic peritonitis with perihepatitis. In one the ascites was serous, in the other chyliform. Apart from the history or presence of other syphilitic signs, important points are, the absence of a history of alcohol and dyspepsia, the fairly healthy appearance of the patients, the absence and wasting and toxæmia of hæmorrhages or jaundice, and of a large spleen, which, in progressive cirrhosis at least, is almost a constant occurrence. Chronic perihepatitis is, in addition to other signs, characterised by a constant recurrent ascites, not observed in syphilis of the liver. In the fourth case, the patient, under the care of my colleague, Dr. Bushby, was a sailor, æt. 35, who had suffered from dysentery two and a quarter years ago. On admission, he was obviously very ill with irregular fever, marked anæmia, and a leucocytosis as high as 27,000. The liver projected well below the costal margin, the lower edge was felt firm and distinct. On the right lobe in the anterior axillary line was a smooth, round projection, painful on pressure, and semi-fluctuant. I hope you will agree with me that the proper diagnosis was tropical abscess. Mr. Monsarrat, however, on opening the abdomen, disclosed a tumour-like mass, having the appearance of a gumma. Subsequent treatment with iodide completely cured this patient, and there can be no doubt that the patient suffered from syphilis of the liver. Cases similar to this are recognised; and, so far as my knowledge helps me, I fear I can only class this particular example as one of those instances in which the reasoning was legitimate, but the conclusion incorrect. Of course

(a) Paper read before the St. Helen's Medical Society.



the history of dysentery and high leucocytosis were important facts which could not be ignored.

To summarise: Syphilis should always be thought of; the disease is often curable; it resembles chiefly common cirrhosis and perihepatitis, but may closely simulate cancer and hepatic suppuration.

A condition we often meet is the splenomegaly of infancy. The common causes are syphilis, rickets, and gastro-intestinal disturbances, without evidence of either syphilis or rickets. The infant may or may not be anæmic, the spleen and often the liver can be felt a few finger-breadths below the costal margin. The important question is the cause and prognosis. The following are, I think, the chief points in diagnosis. If the enlarged spleen is found in a child during the first six months there is strong suspicion of syphilis; the rickety spleen is chiefly met with from the ages of twelve months to two years. Snuffles, to be evidence of syphilis, must be of long duration. Many children have a simple coryza; occasionally, congenital adenoids may also produce a coryza. Craniotabes, i.e., a thinning of the parietal bones, Parrot's nodes, or cranial osteophytes, chiefly occur on the frontal bones, and are strong evidence of syphilis, as also, of course, is any periosteal thickening of the shafts of the bones. This enlargement of the spleen is a toxic condition, and in syphilis, unlike rickets, it is to some extent a measure of the cachexia. The enlargement of the spleen itself does not imply a bad prognosis. Many of the cases gradually improve and the spleen diminishes in size, as is conclusively shown by the fact that in the later years of childhood the proportion of cases of splenomegaly is not nearly so numerous as in earlier life. The prognosis is to be found in the condition of the blood: a great reduction in the amount of hæmoglobin and of the number of new cells, especially changes in size and form, is serious, and so also is considerable leucocytosis.

Another interesting condition is the syphilitic nephritis. Whilst syphilis is probably a factor in the causation of chronic renal disease, a true syphilitic nephritis may be recognised as occurring in the first two years after infection. Rose Bradford lays stress on the presence of large amounts of albumin, but no diminution in the amount of urine, the absence of casts, and often the absence of dropsy. This form has been chiefly studied by French physicians, and all agree that great benefit follows mercurial treatment. In concluding this sketch on syphilis of the abdominal viscera, I may venture to recall the statement of Osler, that the diagnosis in a number of cases is missed because the testicles are not examined.

*Syphilis of the Vascular System.*—It is remarkable that whilst the small arteries in the central nervous system so constantly show, as the result of syphilitic disease, the characteristic endarteritis, in other parts of the body it is the largest blood-vessel, the aorta, its main branches, and the coronaries, which chiefly suffer; syphilitic endarteritis of the smaller blood-vessels is very rare. The diagnosis and effects of syphilis in some of these instances are perfectly plain. The majority of aneurysms occur in those who have acquired the disease. Of 7 recent cases, 4 had undoubtedly been infected, and the disease could not be excluded in the remaining 3. Muscular strain, with its increase of blood-pressure, often occurring suddenly, is the primary cause, acting on blood-vessels already undergoing atheromatous degeneration. Not infrequently the coronaries are affected with a true syphilitic endarteritis, leading to grave changes in the heart, myocardial degeneration, perhaps associated with an actual gumma or its fibrous transformation. The change is one of the causes of sudden death which may result even when no symptoms have previously existed. The diagnosis is naturally very difficult, and is largely the result of a process of exclusion, and an appreciation of the known pathological effects of syphilis.

An acute myocarditis arises in connection with acute infective disease, especially diphtheria, typhoid,

influenza, pneumonia, rheumatism, and septic infections: it is, as we know, very dangerous, and may leave behind chronic insidious degenerative changes in the cardiac muscle. The patients complain of feeling tired, of dyspnoea on exertion, and of oppression in the chest; later, the symptoms of insufficient cardiac action become manifest, the pulse becomes quick, irregular, and unequal, the first sound at the apex, impure, and at the base often an accentuated aortic sound is heard. Now, unless the history guides us, it is impossible to distinguish clinically whether the case is the result of a previous acute myocarditis, or the result of disordered nervous mechanism, of alcohol, syphilis, or arterio-sclerosis, with degeneration of the coronaries or renal disease. If, however, a youngish man, with no valvular lesion, no history of rheumatism, and in whom the causal factors I have mentioned can be excluded, suffers from symptoms of cardiac failure, syphilis should be thought of.

Again, when a patient presents himself with a large heart, but healthy radial arteries and no renal disease or adherent pericarditis, but perhaps evidence of aortic disease, as indicated by the characters of the second sound and slight impaired resonance over the first bone and manubrium sterni, syphilis is to be thought of. The treatment is difficult: the digitalis group, unless there be actual failure of the right heart, with dropsy and its accompanying symptoms, does little good, and should only be given in small doses. Dr. West has pointed out that digitalis in degenerative cardiac muscle has a peculiar cumulative action; the heart beats are easily reduced from 150 to 120 or 100, and then perhaps suddenly drop to 50 or 40. Administration beyond this point is dangerous. This is an effect of digitalis in cardiac degeneration I have often observed, and I think the drug in such cases must be closely watched. Strychnine is a better cardiac and nerve tonic. The general metabolism of the body may be improved by small doses of calomel, and the peripheral field of resistance regulated by the nitrites with iodide and potash.

One other statement may, I think, be made. Aortic valvular disease without affections of the mitral valve is very rare as the result of rheumatism; it is much more likely to be the result of strain or syphilis, and hence if present in a woman is nearly always syphilitic. Syphilis of the air-tubes occurs with frequency which decreases rapidly with the distance from the pharynx. It is three times more frequent in the pharynx than in the larynx, while in the trachea and bronchi syphilitic affections are rare. It is extremely important to recognise the laryngitis; practically the diagnosis has to be made from tubercle. In almost all cases of tubercle, some signs can be detected in the lungs, though they may be slight. The most characteristic appearance is the pyriform swelling of the arytenoid cartilages and aryteno-epiglottidean folds. This swelling is really an infiltration; it is of a yellowish colour, and, with its vessels, is sometimes spoken of as an injected œdema. The vocal cords are often affected, they lose their polish, present erosions, and the edges are often serrated. The epiglottis is less frequently affected, and then always on its laryngeal surface.

Syphilis differs in nearly all these particulars: the swelling is much more red and inflammatory, and is commonest on the parts adjoining the pharynx; the arytenoid region is rarely affected, and the epiglottis is frequently affected, and then on the lingual surface. Ulcers are sharply cut, and larger than in tubercle. If not adequately treated serious stenosis may result; and I have seen two cases which illustrated the important fact that sometimes, even in syphilis, healing will not occur before a preliminary tracheotomy has been done. Syphilis of the trachea and bronchi are very rare. I have not seen a case; but it should be remembered, for if a main bronchus is affected, it may produce symptoms of obstruction and resemble aneurysm or mediastinal tumour, but the cough has not the peculiar brassy quality, and there is no laryngeal paralysis. Syphilitic disease of the lungs is so rare that it hardly enters into clinical medicine. It never causes destructive disease like

tuberculosis. Several cases are, however, recorded in a recent number of the *Liverpool Journal* which may fairly be said to satisfy the tests. I have met with two cases of lung disease of interest in this connection, in the subjects of syphilis. In one there were tertiary lesions of the skin, and choroiditis, with signs of consolidation about the hilus and apex. Repeated examinations for tubercle bacilli were negative, and mercury and iodide certainly caused marked improvement.

The other case came to the *post-mortem* table, and certainly the lesions were of a very unusual character, and might readily have been syphilitic: here, also the tubercle bacillus was absent, though looked for many times. The frequent examination of the sputa is an important point.

*Syphilis of the Nervous System.*—It is necessary, both from the point of view of pathology and of therapeutics, to draw a sharp distinction between the true syphilitic affections of the nervous system, and those which occur in persons who have had syphilis: these affections, known as meta- or post-syphilitic, are locomotor ataxia and general paralysis. They are very important, and may present many difficulties in diagnosis, especially in the case of suspected general paralysis of the insane. I cannot discuss them now, but may say that I do think anti-syphilitic treatment, if exhibited early, does sometimes undoubtedly arrest these terrible diseases. At a later stage such treatment is useless, if not positively harmful. A true syphilitic disease shows the characteristic lesions, which are nearly always either—

- (1) a vascular change, notably endarteritis;
- (2) a diffuse round-celled exudation, especially prone to affect the meninges;
- (3) a true gummatous formation—which is quite rare.

With regard to their frequency, of 1,000 hospital admissions I find 15 have suffered from true syphilis of the nervous system. They constitute a grave class of disease, but within certain limits react well to treatment. These limits are sharply defined, and it is well to emphasise, when dealing with any kind of lesion of the central nervous system, that damage once done, is irremediable if it has proceeded to actual destruction of the nervous substance, for repair of the essential elements does not occur. The natural history is as follows: the syphilitic virus gradually produces a pathological alteration in the tissues, without at this time causing symptoms; then suddenly, if the lesion has been one of the vessels, the blood-supply is obstructed. Symptoms due to interference with the nervous functions make their appearance, due to anæmia and pressure from the exudation of fluid. If untreated, death may result from the extent of the lesion and the importance of the parts rendered functionless, or the exuded fluid may be absorbed and pressure relieved, circulation re-established, and finally the permanent effects are proportional to the amount of actual destruction of nervous substance which has taken place. So, the natural history of a syphilitic vascular lesion does not differ in any way from that of the effects of vascular disease from other causes.

Specific treatment can do two, and only two, things:—(1) It can remove the specific newly-formed tissue which has caused the symptoms; or (2) it may prevent the pathological condition present elsewhere from increasing, which in its turn may cause symptoms. It is powerless to alleviate the damage already done, and it has no specific effects on the exudation of fluid, to which symptoms are often due. It is the same when we are dealing with the new formation of round cells about the meninges or with a gumma. It is well then to have precise ideas as to the real use of anti-syphilitic remedies, otherwise a correct prognosis is impossible.

*Syphilitic arteritis* may occur in the brain and spinal cord. It occurs early after the primary affection, often in from six months to two years, though occasionally at a later period. When the resulting thrombosis is in an artery of the brain, there is a

sudden monoplegia or hemiplegia, often a temporary aphasia.

The distinguishing features of the seizures are—

- (1) The age and sex, though, of course, syphilis is sometimes acquired in advanced life.
- (2) The presence of prodromal symptoms, notably nocturnal headaches, vertigo, insomnia, and loss of memory. In some cases the pain in the head is of a neuralgic nature, and may be treated with palliative remedies until a hemiplegia of aphasia gives the clue.
- (3) The presence of syphilitic lesions elsewhere, especially periostitis, the scars of syphilitic ulcers, leucoderma, or early arterio-sclerosis.

A young man with sudden hemiplegia usually suffers from syphilis or mitral stenosis; in young women syphilis is also to be remembered; but I have seen a number of cases of hemiplegia in which the thrombosis was probably due to a blood state. In these cases of thrombosis there are rarely severe apoplectic-form symptoms; consciousness may not be lost at all, as is so commonly the case when there is intracranial hæmorrhage. It must be remembered, however, that syphilis is sometimes the cause of cerebral hæmorrhage in young people. The disease of the vessels goes on to aneurysm formation. I published a short time ago such a case: the patient was a young woman in whom there was no evidence of syphilis, though it could not be excluded. I show you some of the arteries from her brain; they are very characteristic and on one of them an aneurysm the size of a big pea had formed and ruptured.

The prognosis in simple thrombosis is fairly good, though the points I have mentioned on the limits of therapeutic action ought to be borne in mind: the patient should be treated by inunctions, which in any urgent case are best persevered with until the gums are just touched; only in this way can we be certain that sufficient mercury has entered the system. Syphilitic hæmorrhage is, however, a very fatal disease, and so is thrombosis when the basilar artery is affected, as evidenced by complete paraplegia and paralysis of the upper limbs.

Meningitis is usually chronic; it may affect the dura or the pia, or spread from one to the other, or the bone of the skull may be invaded. Irregularly and widely distributed affection of the cranial nerves is strong evidence of syphilis. The meningitis has a peculiar predilection for the oculomotor nerves, and here also the palsy is often asymmetrical and irregular, and the paralysis may vary from time to time. The meningitis, of course, cannot pick out separately the nerves for the internal or external eye muscles, and this forms a valuable distinction from the ophthalmoplegia of nuclear origin, where, owing to the distance which separates the several nuclei, the pupil may escape, but the external muscles may be paralysed. Unilateral ophthalmoplegia is also a sign of interference with the nerves at the base, and hence may be due to syphilitic meningitis. Often the same prodromal symptoms that herald thrombosis may precede meningitis; and if the meningitis be on the convexity of the brain, Jacksonian epilepsy may occur.

Occasionally general convulsions exactly like those of epilepsy occur: they are to be distinguished by the age of the first attack, the presence of nocturnal headache, loss of memory, and attacks of temporary aphasia. Epileptiform convulsions are also well known as a symptom of general paralysis. Optic neuritis is rare in cortical meningitis, a point of distinction from cerebral neoplasm; though it must be remembered that a tumour of the cortex may not give rise to optic neuritis until late, and in fact ought to be recognised before this occurs. The peculiar characteristic symptoms of syphilis already mentioned, its random and widely-spread distribution, the history and the presence of associated symptoms, should enable one to form a diagnosis.

A very important point is the diagnosis between cerebral syphilis and general paralysis of the insane.

The chief points of distinction are, that in the latter

the cranial nerves are not paralysed; there is the true Argyll-Robertson pupil, not a fixed immobile pupil; the peculiar tremor of tongue and lips, characteristic mental symptoms, frequent epileptiform and apoplectic seizures, and the progressive advance to a fatal termination, with the uselessness of anti-syphilitic remedies, are other marks of general paralysis. These remedies are usually of marked benefit in true cerebral syphilis; sometimes, however, they quite fail. I have a melancholy example in my mind of a man who came to see me from this district with ophthalmoplegia, undoubtedly a true syphilitic meningitis; this had been completely cured at the Eye and Ear Infirmary by Mr. Hugh E. Jones, but returned in spite of any treatment, spread to the opposite eye, and produced complete blindness as well as motor paralysis. Syphilis in the spinal cord is due to the same lesion as in the brain, and is manifested chiefly as a meningitis or myelo-meningitis, or is due to a thrombosis of the spinal vessels, producing paraplegia. The prominent symptoms of the meningeal form are pain in the spine, pains in the hips, and girdle pains, all indicating affections of the roots; then follow gradually symptoms of interference with the conduction tracts of the cord, with varying degrees of motor or sensory paralysis.

The diagnosis is to be made by the history, the age of the patient, the associated symptoms often of cerebral syphilis, headache, hemianopsia, diplopia, affections of the pupils, choroiditis, etc.

Treatment may be singularly efficacious. Syphilitic thrombosis shows itself, as do all vascular affections of the nervous system, by its sudden onset, producing paraplegia. It has now, I think, been quite proved that the great majority of cases of sudden paraplegia, the so-called acute myelitis, are due to syphilis. In the course of a few days or hours the patient may lose the complete use of both legs, marked loss of sensation is present, and the bladder and rectum are early affected. Now there is nothing in these cases except the history and the known pathology to enable a diagnosis as to cause to be made. The affection occurs quite early after the infection, from six months to five years being the usual time. It may rapidly run a fatal course, or later considerable regression of the symptoms occurs and the patient appears as our old friend—a spastic paraplegic. The disease is, as I have indicated, very dangerous; a water-bed and the most careful attention to the bladder and the prevention of bedsores is required; a diaphoretic, with some ergot and belladonna, may be given.

Is anti-syphilitic treatment useful? I think it may be. The injection should be carefully practised, avoiding the same place for fear of sores. I have seen several remarkable recoveries, one in a man with absolute motor and sensory paralysis and complete incontinence, who is now walking about the Liverpool Exchange.

One final word about treatment. I have mentioned to you that these syphilitic affections are prone to recur, perhaps in other parts of the nervous system. It is well, therefore, when the acute manifestations have been subdued, to institute a prolonged course of iodide, perhaps with small doses of mercury, especially if the affection has occurred soon after the primary infection. The combination of the drugs is more beneficial than the exclusive use of either. A good plan sometimes is to alternate the treatment. One use of the iodide is probably that it liberates the mercury already in the tissues, and so revives its specific action.

DR. LITTELJOHN's resignation as medical officer at the Hanwell Schools has been announced at a meeting of the managers of the Central London School District, held under the presidency of Mr. T. Pallister Young. He has held the position since 1870. It was unanimously resolved to accept the resignation with regret, and to send a sympathetic letter to the medical superintendent, whose retirement is due to ill-health.

## THE INOCULATION ACCIDENT IN MANILA, PHILIPPINE ISLANDS.

BY PROF. W. M. HAFFKINE.

THE following article has been sent us for publication:—

### "ACCIDENTAL INOCULATION WITH THE VIRUS OF PLAGUE.

"By Paul C. Freer, M.D., Director, Bureau of Science, Manila, P.I.

"Last autumn, as the unfortunate result of the accidental contamination of the cholera vaccine with a culture of plague bacilli, a number of natives were inoculated with plague, and several died. The occurrence makes of interest the following account of the work with the cholera vaccine.

"For the last three years Dr. Richard P. Strong, of this bureau, has been working on a cholera vaccine which consisted of an extract of the killed, digested and filtered organisms, later modified to a mixture of such an extract with one obtained by shaking on a shaking machine the living organisms in distilled water and then filtering. Obviously this product is always carefully tested, and is absolutely sterile, and the health department has used it on about 7,000 persons in the Philippines. One-half of the prisoners in the Government prison at Bilibid were vaccinated with this vaccine, and one-half unvaccinated. The same was done in a number of villages in the surrounding territory. Needless to state, no bad results followed from these vaccinations. There is a moderate general reaction following the inoculation, but the local reaction is very slight. The reaction from vaccination with this cholera vaccine is not as serious as that which frequently follows the small-pox vaccination, yet a high blood immunity results.

"Subsequent experiments in the town of Angat, where 1,078 persons were vaccinated, showed that after vaccination there were 122 cases of cholera, 121 of which were among the unvaccinated, and only 1 among the ones vaccinated. In the prison we had no further epidemic of cholera after the vaccination, but no conclusions can be drawn because the cholera was stopped by sanitary measures. It may be stated, however, that since the vaccination we have had 20 cases of cholera, 18 of which were among the unvaccinated and 2 among the ones vaccinated.

"Dr. Strong continued his work on immunity against cholera by vaccination, as he was convinced that this means was one which would aid in the prevention of large epidemics in the future, since it is known that apparently healthy people frequently carried about in their intestines cholera spirilla, which are passed in the stools, and hence quarantine and sanitary measures cannot always be considered effective safeguards against a cholera epidemic. Certainly, the end sought for is a great one, and the results satisfactory.

"Last year, in a Medical Congress at Berlin, the method of vaccination by means of the entire organism and not by its extracts was advocated. Haffkine has urged the use of the living organism, and believes that by its use a higher immunity can be obtained. Dr. Strong, of necessity to complete his argument, needed to make some vaccinations by this method, as he was convinced that it was not superior to the one generally employed by this laboratory, but, obviously, with such arguments in literature others would come forward attacking his results. In employing the living organism, it is necessary to use a 24-hour old culture, owing to the fact that after this time changes take place in the culture owing to the formation of ferments, death of a large number of bacteria, etc., and, consequently, while the method allows of every test as regards the purity of the cultures up to 24 hours before their use, after this time (when many cultures are employed) no satisfactory test of its purity can be made, and no test on animals can be carried on, since the cultures must be inoculated 24 hours after their preparation. Inoculations had been carried on in Bilibid several days without accident. On the day of the misfortune 24 men were inoculated, but this was not compulsory.

The history of this vaccination is about as follows:—

"The culture was carefully carried out and identified, and was known to be a pure culture of the cholera organism up to 24 hours before the time when the vaccination was made. A large number of tubes of cholera media were inoculated from these pure cultures and placed in the incubator. On the following morning the cultures were each suspended in 1 cubic centimetre of saline solution, the whole mixed, and inoculations, as was necessary, made immediately after the preparation of the suspension. It is supposed that someone placed a 48-hour virulent plague culture among the cholera cultures, the blue pencil marks which designated the culture having been erased from the glass by handling. This view is supported by the fact that on the afternoon of the day of inoculation a 48-hour virulent culture was missed from the incubator. It was known certainly that one of the five plague cultures prepared two days previously, as was shown by Dr. Strong's note-book, had been removed from the incubator, but it was not until two days later, when he wished to examine the opsonic index of five guinea-pigs, for each one of which a 48-hour richly-grown culture had been prepared, that the plague culture was missed.

"It was proved by a technical committee of three physicians appointed by the Governor-General to investigate the matter that a 48-hour richly-grown plague culture spread over the entire surface of the entire slant resembled some of the cholera cultures so strongly that they were unable to identify or to pick out such a plague culture by its gross appearance when it was placed among a number of the cholera cultures of the strain employed. It was also shown that a hanging-drop preparation and the stained microscopic one made from the mixed suspension of all the cholera cultures contaminated with the plague one (as used for the human inoculations) did not reveal the suspicion that the fluid was contaminated with plague bacilli, since no bipolar staining organisms were visible, and, evidently, the plague bacilli were in too small numbers, or those present did not show any sufficiently distinctive morphology to separate them from the pleomorphic cholera organisms in the saline solution. Nevertheless, this same suspension, in which plague bacilli were not detected by microscopic examination, when injected subcutaneously into guinea-pigs and a monkey, caused, after several days, death from plague infection. It has not been ascertained who placed the plague culture among the cholera ones after all possible tests of the cholera culture had been made. An investigation of the entire matter was pursued by the Government prosecuting attorney at our request, and later the Governor-General, in order to satisfy public opinion, appointed a committee of eight, six Filipinos, one American, and one Englishman, three of which committee constituted a technical committee, for investigation.

"While the serum division of this laboratory is also in charge of Dr. Strong, and while this division prepares our regular cholera vaccine, it must be clearly understood that the regular preparation of our cholera prophylactic had absolutely no connection with this matter, and that the vaccine used by Dr. Strong on the day of the accident is entirely distinct from the preparation with which he is identified. The method used on the last 24 prisoners is the one which is best known by the names of 'Ferran' and 'Haffkine.' It is perhaps unnecessary to add that the laboratory has prepared several million units of vaccine virus and several thousand doses of plague prophylactic which have been used (in addition to the cholera prophylactic) with good results and without accident."

# I.

The study of vaccination against cholera, according to the method worked out in 1890-93, in the Paris Pasteur Institute, began in India in April, 1893—that is, some thirteen years previous to the Manila accident. The procedure which was adopted for cultivating and inoculating the vaccines was described, with great detail, in a pamphlet published in Lahore, Punjab, in 1894, by Mr. E. H. Hankin, M.A., Chemical Examiner and Bacteriologist to the Government, Surgeon Lieut.-Col. Ch. H. Owen, I.M.S., Medical

Adviser to the State of Patiala, and myself, under the title of "Technique of Haffkine's Anti-Cholera Inoculation." The pamphlet was reproduced in the *Indian Medical Gazette*, Calcutta, in June, 1894. A more detailed version of the same "Technique" was published in the journal just mentioned two years later, in June, 1896, by Lieut.-Col. (then Surgeon-Captain) Hare, I.M.S., the present Sanitary Commissioner of Eastern Bengal and Assam. In the issue of the same journal for November, 1896, in an article entitled "Technique of Haffkine's Method of Preparing Fixed Cholera Vaccine," the same officer described the method of transforming cholera virus into the vaccine strain.

The extent to which the above technique rendered the operation safe, and the facility with which it was learned by non-specialists and by subordinates, may be gauged from the following facts.

The inoculations were at first carried on by myself, and between 1893 and 1896 were introduced in over 100 towns and villages in the Indian Plains and the Himalayas. I prepared the vaccines in trains, while travelling from place to place, in the ordinary passenger carriages, and at railway stations, while waiting for the arrival of trains; also in tents, in "dāk-bungalows" and rest-houses; in rooms placed at my disposal for a day or two in dwelling-houses, and transformed for that time into "laboratories"; and sometimes (in Calcutta and Agra) in established laboratories, in which various work was carried on at the time by other workers. Between April, 1893, and July, 1895, 42,197 people, who received in all close on 70,000 injections, were inoculated under these conditions, and in 1896 a further 30,000 were so operated on. A large proportion of the inoculated lived under medical and administrative supervision, so that any unusual effect of the inoculation could not have escaped notice. Thus, the operated on of 1893-95 comprised officers, non-commissioned officers and men belonging to 64 British and Indian regiments; contract labourers of 45 tea plantations in the Brahmaputra and Surma Valleys of Assam; inmates of nine civil gaols; children of boarding and other schools, etc.

In 1894 the Municipal Corporation of Calcutta voted a grant to its Health Office for applying these inoculations experimentally. A Hindu Medical Inspector, Mr. Jonomanjoy Chowdry, was put on to this duty. He was assisted in the preparation of the vaccines by two other Hindu officers, Messrs. Jogendranath Dutt and Sasi Bhusan Ghose, of the Calcutta Health Office. None of these doctors had been acquainted with bacteriological work before. Apart from the preparation of the cholera vaccine, which, after a period of instruction, they were left to carry on independently, they became soon engaged in a variety of other kindred work, notably in connection with infectious diseases affecting the ponies, buffaloes, and bullocks in the "gowkhanas" of the municipal scavenging department; with outbreaks of rinderpest and other epizootics reported from Calcutta and Howrah; and in connection with the then Health Officer's studies of pustules and vaccine lymph, in the municipal vaccine dépôt. Cholera inoculation in the bustees and suburbs of Calcutta, with cultures prepared in the Health Office, was carried on daily for two years, and the results were closely followed by various members of the Municipal Corporation. The number of persons inoculated was 7,690. About two-thirds of them underwent inoculation twice, at an interval of five days, so that the number of injections of vaccine performed was about 13,000.

In 1896 anti-cholera inoculation was started at Purulia, on the Bengal-Nagpur Railway. At first Surgeon-Captain (now Major) J. C. Vaughan, I.M.S., Superintendent of the Campbell Medical School, Calcutta, then Deputy Sanitary Commissioner for the Chota Nagpur Circle, was in charge of the work. Two Hindu assistant-surgeons were appointed to operate under his orders. Surgeon-Captain Vaughan was, after a few months, ordered away to the Tirah campaign, and from that time on one of the assistant-surgeons, Gopal Chunder Mukerjee, was left in independent charge, the other co-operating with him. In this dépôt the operations were performed every day

for eight and a-half years, till the end of 1904, and the number of persons inoculated was as follows:—

In 1896	...	...	4,413
„ 1897	...	...	10,950
„ 1898	...	...	4,296
„ 1899	...	...	2,388
„ 1900	...	...	13,291
„ 1901	...	...	3,453
„ 1902	...	...	3,144
„ 1903	...	...	2,202
„ 1904	...	...	1,623
In all	...	...	45,760

The material for these inoculations was manufactured, examined and used in an improvised laboratory by workers who had had before no bacteriological training. The inoculated were almost exclusively coolies contracted for transport to Assam, and who were, at the time of inoculation, and during their subsequent journey and service, under the supervision of Government and labour supply officials. The slightest mishap would have at once been known to the emigration authorities and reported upon.

In none of the above operations has an untoward result at any time come to knowledge, and quite certainly no accident of any gravity has ever occurred. Anti-cholera vaccination has thus been demonstrated to be as free from danger as any method devised by man.

## II.

Just as in vaccination against small-pox and inoculation against hydrophobia, as well as in Professor Kolle's inoculation which the Manila laboratory has advocated and applied against plague, the vaccine used in anti-cholera inoculation is a live virus, and is not sterilised before injection. Nevertheless, the details mentioned in the preceding paragraphs and referring to a long testing in India, indicate that the methods followed in the preparation and use of that vaccine render it, even in relatively inexperienced hands, safe from contamination, and eliminate sources of mishap.

Again, neither in the anti-cholera vaccine, in the emulsion of spinal cords containing live hydrophobia virus, as used for anti-rabic inoculation, nor in the live virus of small-pox vaccine lymph, nor in any of the sera and drugs used in hypodermic injections in man and animals, can contamination with harmful germs be detected with certainty by the microscope; but obviously this does not mean that either of the methods mentioned, now so extensively practised, is insecure. In the anti-cholera inoculation, the examination by the microscope is an adjunct so important that, when applied in the way in which it has always been applied in India, an accident such as occurred in Manila is impossible, and an extraneous culture like that of plague would be detected immediately. Nevertheless, entire elimination of mishap is secured, obviously not by microscopic examination alone, but by an *ensemble* of operations of which some precede and others follow that examination, and by the general dispositions of the work.

## III.

In the accident at Manila it is essential to note that the cholera vaccine did not get contaminated by plague spontaneously. Such an eventuality may be treated as outside all practical possibilities. Every bacteriologist of experience will take on himself to say that the spontaneous invasion of a bacterial culture by germs of cholera, plague, glanders, anthrax, diphtheria, tubercle and certain other specific microbes is not to be thought of any more than the spontaneous contamination of such a culture with arsenic or strychnine. There are a few pathogenic species—like those causing abscesses, for instance—which are, upon occasions, found to contaminate cultures and other materials. In Manila a plague cultivation, presumably free from admixtures of any kind, was put by the operator into a watery suspension of cholera cultures, the latter probably being at the time quite pure and uncontaminated also.

The accident became possible by the operator deviating, amongst other points, from the following two rules prescribed in the anti-cholera inoculation—

viz., the contents of the culture tubes should not have been mixed; and each tube, immediately before being used, should have been, apart from other examination, submitted to an examination by the microscope. Under these circumstances a plague culture would have never passed for a cholera culture.

It is not stated that the material injected into the men in Manila had been examined by the microscope, but the Technical Committee of Inquiry have found that when they mixed, in an experiment *ad hoc*, the contents of one cultivation tube of plague with that of a large number of cultivation tubes of cholera (as had been actually done at the time of the human inoculation), and examined a drop of the mixture, the plague bacilli were overlooked under the microscope. Such a result is, of course, only too probable.

## IV.

The details of the Manila accident reported by Dr. Freer tend to show that its occurrence did not stand in connection with the degree of perfection or deficiency which belong to cholera vaccination or to any bacteriological method as such.

In all pharmacies and shops where collections of drugs are kept, simple dispositions are adopted, on the responsibility of those in charge, for making it impossible for dangerous materials to get mixed with harmless ones. Obviously these measures had, at the time of the accident, not been in force at Manila, and it must be presumed that some particular circumstances which existed at the time did not allow of the necessary dispositions being taken.

It is, further, a practice with those in possession of materials of various kinds, particularly harmful ones, to differentiate these by inscriptions or marks of identification. The first action of an apothecary, when handling his phials, is to look at the label, independent of any other mode of examination—chemical, physiological, or other—which may be at his disposal for identifying the materials. The labelling of cultivation tubes is one of the articles of instruction mentioned in bacteriological text-books and lectures. In the pamphlet on the "Technique of the Anti-Cholera Inoculation" referred to above, the procedure is enjoined on p. 8, paragraph 12, where it is stated: "Mark the inoculation tubes unmistakably, in order that the kind of vaccine they contain and the date of their inoculation shall be known." The operator who omits to provide his preparations with clear inscriptions, or omits to take notice of them when using the preparations, renders obviously nugatory the whole of the safeguards, however perfect, which have been devised for preparing his materials in a pure condition.

In Manila, where the tubes of vaccine for inoculation in man had to be incubated in the same box as tubes of virulent plague, and other persons than the vaccinators had access to the same incubator and to the same batches of tubes, it is stated that the inscription on the tube was not ascertained previous to using it. The accident was, therefore, in every way of the same kind as would be incurred by a pharmacist mixing up a poisonous substance with the drug which he is preparing, and it was preventable also in the same way as such accidents are prevented in pharmacies.

## V.

The idea that the Indian method afforded no possibility of avoiding the accident appears to have been based on the following considerations mentioned by Dr. Freer:—"While the method allows of every test as regards the purity of the cultures up to 24 hours before their use, after this time (when many cultures are employed) no satisfactory test of their purity can be made, and no test on animals can be carried on, since the cultures must be inoculated 24 hours after their preparation." The accident was caused by the mixing up of a plague culture with the cholera vaccine at the very moment of using the latter. Obviously, no test applicable 24 hours or any longer interval before that moment, nor any test applicable a shorter period, even one hour, before, could have prevented the result of a confusion thus made. To avoid such a confusion—once the general dispositions in force at the time permitted of its occurrence—a test or tests were

required applicable at the moment of using the tubes. The most direct of such tests were those mentioned already, viz.: (1) the reading of the inscriptions made for that purpose on the receptacles; and (2) the examination under the microscope of the contents, in the manner prescribed for the anti-cholera inoculation. There were also certain other aids, but the special object of the present article does not seem to require entering into them.

## VI.

The Manila officers have gracefully recognised as conclusive the results of the Indian cholera vaccination studies, and have themselves contributed not a little to the subsequent investigations on the matter. A few years ago, before introducing that vaccination in the Philippines, the very able director of the laboratory there made, in the Institute for Infectious Diseases in Berlin, a study of the vaccine used in these operations. The vaccine—as described in the publications referred to previously—is a strain of cholera germs transformed into a virus of exalted, fixed potency, by cultivating it, in accordance with certain rules, in the peritoneal cavity of the guinea-pig. The bacteriologists in Berlin compared this vaccine, from the point of view of its immunisation properties, with the natural strains of cholera germs maintained by cultivation in laboratories, and convinced themselves of the significance of the transformation imparted to the vaccine. Consequently, in the Philippines, a strain has been adopted, for preventive inoculation in man, which is prepared and maintained in the way in which this is done in India; but, instead of operating with that substance itself, they advocate the plan of leaving it to soak in water, at the temperature of the incubator, and using the resulting soluble extraction, a plan to which, as Dr. Freer mentions, it has been objected at the last International Medical Congress in Berlin that the extraction might not have the protective effect which the vaccine itself had. The Manila officers are under the impression that one of the advantages of the watery extraction is that it is free from the possibility of misadventure which they have had with the vaccine. The same department of the Manila institute that prepares the extraction of the cholera vaccine prepares also soluble products of other microbes, such as the toxin of diphtheria; that of tetanus, of which the admixture of a few c.c.s. would, of course, suffice to kill a horse; probably, solutions of snake venoms for the preparation of anti-venene, and so forth. If these microbial toxins and solutions, or, for the matter of that, any alkaloids or other drugs were to be so kept as to permit of their being inadvertently mixed with one another; if, before using them under such circumstances, the inscriptions on the receptacles were not ascertained; physical differences of the contents overlooked; and the contents mixed together and used; that is, if a concurrence of circumstances took place identical on all points with that which they have had the misfortune of having at the time of the late accident—the extraction of the cholera vaccine would obviously be exposed to the same possibility of misadventure as has occurred in the use of the vaccine. Of course, it is not suggested that the above is the condition prevailing normally in the Manila laboratory. The latter has, in a few years, and most deservedly, taken a place amongst the first-class institutions of its kind in the world. It is only unavoidable now to make it clear that their accident has not been conditioned by the peculiarities of the anti-cholera vaccination method, as they believe it has.

## VII.

Referring to the facts mentioned in Section 3 of Dr. Freer's article ("Subsequent experiments in the town of Angat. . . . In the prison we had . . . and two among the ones vaccinated"), they do not, unfortunately, convey indications as to whether the extraction of the cholera vaccine confers on man the immunity against Asiatic cholera as has been obtained with the vaccine. Such an indication would have been most welcome to me, but obviously Dr. Freer had no data yet for making any definite affirmation on the matter. In the case of the town of Angat, the

number of non-vaccinated inhabitants, among whom 121 cases of cholera occurred, and the degree of exposure to infection, in the case of the vaccinated and of the non-vaccinated, have not been made known, and consequently a deduction from the figures given is impossible. In the Government prison in Bilibid, where one-half of the prisoners had been vaccinated and one-half not, after which event 18 cases of cholera occurred among the non-vaccinated and 2 among the vaccinated, the result would have been quite important, and, under requisite conditions, even conclusive; but, presumably, between the time of vaccination and the date of the cholera occurrence changes of which details are not related in the article had taken place in the composition of the prison population; for Dr. Freer states that no conclusion could be drawn from the facts related about that prison.

It is to be hoped that the above explanations will not be viewed as implying any want of consideration for the Manila scientists, whose efforts, ever since the establishment of their laboratories, have enriched science with numerous contributions of a truly remarkable character.

## OPERATING THEATRES.

## ST. MARY'S HOSPITAL.

ENDOSCOPIC DILATION OF AN OESOPHAGEAL STRICTURE WHICH WAS IMPASSABLE TO ORDINARY BLIND BOUGIE-ING.—DR. WILLIAM HILL operated on an emaciated man, æt. 46, under the care of Dr. Willcox. The patient had suffered from progressive dysphagia for nearly a year, and had practically been unable to take solid food for nearly the same period. His illness commenced 14 months previously with an attack of hæmatemesis; he had had vomiting immediately after taking food just before this. His gastritis was evidently alcoholic, and he also suffered from alcoholic neuritis.



FIG. 1.

FIG. 1.—Deep Pharyngoscopy and the first stage of Oesophagoscopy; the distal end of the long tube-spatula is in the deep or postcricoid pharynx, thus enabling the region of the upper orifice of the gullet to be examined.

Dr. Hill pointed out his dysphagia was certainly not due to paresis of the gullet, for in such cases the bougie is easily passed.

Six months previously a surgeon had failed to pass a bougie through the stricture by the blind method, and two months later a physician was similarly unsuccessful. The stricture was localised as commencing at a distance of 9 in. from the incisor teeth—i.e., about 2 or 3 in. from the introitus oesophagi. Dr. Hill remarked that it was a matter of common experience that dysphagia from organic stricture of gullet,



whether cicatricial or malignant, is not infrequently temporarily improved by bougieing, and as the man had lost 4 st. in twelve months, it was resolved to resort to œsophagoscopy with the twofold object of endeavouring to determine the nature of the lesion by direct inspection, and to attempt dilation of the stricture by means of graduated bougieing, cautiously carried out under direct vision. The patient was anæsthetised with chloroform, and the possibility of spasm of the larynx rendered less likely to occur by means of the local application of 10 per cent. cocaine in a solution of adrenalin. Brüning's œsophagoscope was then passed; the gullet was found healthy for the upper 2½ in. of its extent, when the passage was discovered to be suddenly narrowed to a marked degree. The constricted lumen was reduced to a mere depression during expiration, but during inspiration the tube opened, presenting a circular lumen with an inflamed reddened margin, the lumen being about 4 millimetres in diameter. The mucosa immediately above the strictured area was distinctly œdematous. There was no visible ulceration. Dr. Hill said that strictures due to subacute œdematous inflammation offer little resistance to the passage of a bougie, and in order to determine whether the lesion was of this nature, a No. 6 Mackenzie bougie (*i.e.*, 6 mm. in diameter) was tried; it, however, failed to pass through the strictured area; No. 5 was also tried without success. The stricture was therefore evidently of a hard variety, and not of the soft, œdematous kind. A No. 2 filiform bougie (2 mm. diameter) was, however, easily introduced, and the stricture was then gradually dilated up by the insertion of larger and larger bougies, until a No. 9 (*i.e.*, 9 mm. in diameter) was with some difficulty passed; it was allowed to remain *in situ* for

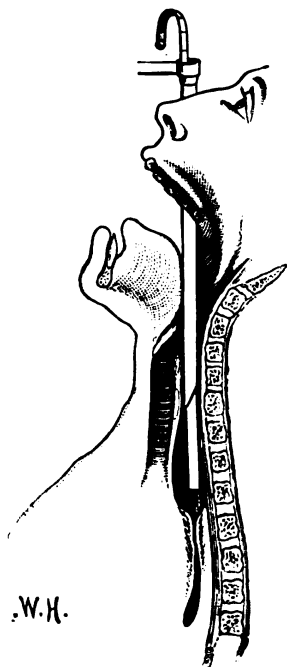


FIG. 2.

FIG. 2.—Second and third stages of œsophagoscopy; the tube is passed into the upper part of the gullet, and the proximal end of the tube is then shifted to the angle of the mouth opposite the molar teeth; the extension tube is next slowly inserted, and the gullet explored as far as may be necessary compatible with safety. By this method, in suitable cases of stricture, dilation by graduated bougieing, and even the application of radium, can be carried out with precision.

a few minutes, but this had little further dilating effect, for it was tightly gripped, and it subsequently was found impossible to pass a larger size. No bleed-

ing ensued, and this, Dr. Hill remarked, pointed to the fact that ulceration was not present.

The patient frequently stopped breathing during the time the endoscope was in the gullet, and on his return to the ward this phenomenon continued at intervals during the next three-quarters of an hour, and artificial respiration had at times to be resorted to. Respiratory trouble of this kind, Dr. Hill said, is observed every now and then in cases of prolonged œsophagoscopy examinations under general anæsthesia.

Dr. Hill subsequently pointed out that the result in this case was by no means so striking and gratifying (as regards the relief of dysphagia) as has been sometimes observed in similar cases of endoscopic dilation. The man was, it is true, able to get down with some difficulty bread and butter and mince, but soon relapsed. Considering that the narrowed tube had been dilated up to 9 millimetres, this was decidedly disappointing.

A fortnight later the procedure was repeated, and an attempt made to dilate the stricture still more by the insertion of a laminaria tent of 6 mm. diameter. The process was, however, very slow and the patient's condition under the anæsthetic, etc., did not permit of a sufficiently prolonged sitting to obtain any substantial gain in the diameter of the narrowed portion of the gullet. A soft, long gastric tube of the calibre recently employed by Symonds in such cases (*viz.*, 6 mm.) was then passed through the gullet into the stomach, and fastened at its proximal end to the teeth; on account, however, of the gastritis, this was vomited up a few hours later.

Dr. Hill remarked that, although an endoscopic examination in this case did not absolutely clear up the diagnosis, the balance of evidence pointed to malignant disease. The stricture was seen to be annular, and this type of stricture, if cicatricial, would be hardly appreciably dilatable without a cutting operation, whereas in this instance the lumen, by graduated bougieing, had been enlarged from 3 to 4 millimetres to 9 millimetres; moreover, the œdematous condition of the mucosa in the region of the upper end of the obstruction was much more suggestive of epithelioma than of a cicatricial stricture. The failure to dilate the narrowed gullet up to a diameter of 13 or 14 millimetres, which would have resulted in substantial though temporary relief of the dysphagia, had left the patient in the condition that the next palliative measure—gastrostomy—was merely a matter of time. Had the man been a person of means, instead of a hospital patient, another method of treatment might have been tried, *viz.*, the insertion of a tube containing an adequate quantity of radium into the gullet, as is practised in Paris. In this country, however, no hospital as yet, so far as Dr. Hill is aware, possesses the necessary tube containing 5 centigrammes of radium bromide, on account of the great cost, *viz.*, £800. In private practice the matter is different, and judging from the very definite improvement in two of his patients, who are being treated by Dr. Finzi with a 5 centigramme radium tube, he is hopeful that the claims made by Einhorn some years ago, and by Guisez, of Paris, quite recently, may be confirmed as regards the value of radium in early carcinoma of the gullet.

## CORRESPONDENCE.

### FROM OUR SPECIAL CORRESPONDENTS ABROAD.

#### FRANCE.

Paris, August 29th, 1909.

#### CONVULSIONS IN CHILDREN.

INFANTILE convulsions are of everyday occurrence, and yet it may be useful to review from time to time the several varieties of treatment recommended by the best authors, as in these cases parents get frightened and impatient, requiring prompt treatment from the medical attendant.

The first thing to do in presence of convulsions is

to determine the cause of the accident, and, once the causal treatment is instituted, appropriate symptomatic treatment remains to be applied.

All authors, including MM. Hutinel and Babonneix, who have written extensively on the subject, recommend that the child be first freed from all wrappings, and everything suppressed that might impede the normal function of the lungs. This done, recourse will be had to one or other of the following means: bathing, inhalation of chloroform or oxygen, compression of the carotids, blood-letting, saline injections, revulsions, administration of antispasmodics.

Balneation may consist in baths or simple wrapping in the wet sheet. Cold baths might be given, according to Espine, where a high temperature accompanies the convulsions, but should not be employed for very young children (Ausset). But the best method is that of warm baths, which possess the advantage of suiting every variety of convulsions. The patient may be kept in it one or two hours at a time, but the application at the same time of cold compresses to the head is indispensable to complete the treatment.

Inhalations of chloroform have been frequently employed with advantage; but, according to Deseille, they are counter-indicated in convulsions provoked by indigestion; they have been especially useful in very young children.

M. Moussous recommends inhalations of oxygen where the convulsions threaten the patient with asphyxia (cyanosis of the face and the extremities).

Compression of the carotid has been employed with success in some few cases, but the difficulties of such a treatment are obvious.

Blood-letting is indicated in three different circumstances: venous congestion of the brain, lesions of the coverings of the brain, and, above all, uræmia (Picot). It consists in the application of one or two leeches to the mastoid process (Ferrand), or, better still, to the malleolar region (Guersant, Deseille).

Different authors have used injections of artificial serum. For M. Moussous this method would be especially indicated in cases where the convulsions appeared to be the result of intoxications.

As to revulsion, M. Ausset is of the opinion that it is better to abstain from employing it except in case of spasm of the glottis.

Of the numerous drugs called "antispasmodics," chloral, bromide of potassium, and antipyrin alone claim attention.

Chloral has the most rapid effect of the three, but is counter-indicated in cases of cyanosis with asphyxia (Comby).

The action of bromide of potassium, though less prompt, is quite as efficacious, given at the dose of 10 or 15 grains a day. The two drugs, chloral and bromide of potassium, might be given together, the latter during the day and the former at night.

Antipyrin may be given in enema at the dose of 2 to 4 gr. in a drachm or two of water.

Lumbar puncture has been employed in cases of convulsions due to hypertension. Boquel tried it with success in new-born infants.

Once the seizure is relieved, the cause of the malady should be treated, and everything done to avoid a recurrence of the attacks. All cause of cerebral excitement should be removed; the digestive tract should be carefully watched; sea baths, salt, or sulphur baths should be forbidden, as well as tea, coffee, and other exciting drinks.

#### PAINFUL HÆMORRHOIDS.

Cocain, 2 gr.  
Menthol, 4 gr.  
Lanolin, 3 dr.

#### ACNE.

Sublimed sulphur, 1 dr.  
Talc, 1 dr.  
Glycerine, 2 oz.  
Tincture of quillayæ, 2 dr.  
Rose water, 4 oz.

#### ACUTE LARYNGITIS.

Menthol, 1 dr.  
Tincture of opium, 1 dr.  
Cherry laurel water, 1 oz.  
Tincture of eucalyptus, 2 oz.

A teaspoonful in a little boiling water for inhalation.

## GERMANY.

Berlin, August 29th, 1909.

THE *Deutsche Medizinische Zeitung*, No. 64/09, contains a reference to a paper by Dr. Thorkild Røvsing on the VACCINATION TREATMENT OF COLI INFECTIONS OF THE URINARY ORGANS.

The diseases caused by the bacterium coli he says are, as is known, very benign and amenable to treatment. Even pyelonephritis, which is beyond comparison the most serious form of coli infection, and often begins with symptoms of a very alarming appearance, often changes its character under the simple treatment recommended by the writer: flushing the urinary passages with 2 to 4 litres of distilled water *pro die*, combined with a catheter *à demeure*, whereby the flow of urine is continuous, and 1 gm. of salol three or four times a day. In this way the urine becomes a mildly antiseptic fluid. If recovery does not quickly follow on this line of treatment, it is on account of some complication, which prevents the free outflow of urine; a calculus, or tumour, or descent of the kidney, or narrowing of the calibre of the ureter, and the operative removal of the obstacle generally leads to rapid cure of the pyelonephritis. But a minority of cases, which the writer reckons at 15 per cent., success is not attained in this way; these are complicated cases that have not been treated early enough, or such as have had sudden relapses. In these, Røvsing has had recourse to the vaccination form of treatment founded on Wright's theory of opsones, which so far has not been much made use of in coli infections. Generally speaking, any attempts of this kind have been made with pure cultivations from the intestines of another individual, but good results can scarcely be expected in this way, as what is called the colon bacillus is only a collective name for a very numerous series of microbes of very varying degrees of virulence. The writer thought the only correct way would be to use pure cultivations made from the micro-organisms met with in the urine of the patient himself, for it was against these that treatment had to be directed. He has tried this method in 12 cases so far; in all these cases treated by this form of vaccination treatment, the symptoms all disappeared with the exception of the bacteriuria. The vaccines were prepared by taking the bacteria from an agar cultivation washed in a 0.85 per cent. saline solution, and destroyed by warming for two hours at a temperature of 60 to 65 C. For sterilisation a  $\frac{1}{2}$  per cent. carbolic solution was added. The fluid was then diluted until it contained 100 millions of bacteria to the cubic centimetre. The commencing dose for an adult was 15 millions, injected into the arm or leg.

Four cases are given which, on account of their severity, were convincing. Of course, four cases are no proof, but considering that the writer was originally prejudiced against the method altogether, and considering also his great experience in this class of diseases, it is so far an encouragement for others to give it a trial.

One question asked by those who wish to give the method a trial is: are there any special dangers associated with it? The author remarks that so far as he has seen no signs of anything objectionable from its employment. All reactions, both local and general, passed off very quickly. There was slight rise of temperature, but a quick fall without any rigor, and a slight feeling of being unwell, but without being at all pronounced, was the only indication of general reaction. He has never seen any local reaction at the point of injection with small or medium doses, but with large doses there were redness, pain, oedema, and infiltration with some slight lymphangitis—as when 1,000 millions of bacteria were injected. He believes, however, that even this may be avoided by giving the injections in divided doses. In one case only the injections were constantly followed by high temperature and alarming general symptoms. It was that of a woman, æt. 52, with calculous nephritis, in whom, after removal of the stone, considerable febrile nephritis remained. Every time after this patient received the vaccine injections the temperature rose several degrees, she became light-headed, with clonic

convulsive moments of upper and lower extremities. In the course of from 12 to 24 hours, however, these symptoms subsided completely, and she steadily improved afterwards; her urine also became clearer and freer from albumin.

Possibly the dose was too large in this case and given without regard to the opsonic index. On the whole he gained the impression that the vaccination treatment was mild and quite free from risks.

As a reminder to any who intend to make a trial of the method, he remarks that vaccination does not appear to have any marked bactericidal effect, and, that to effect the expulsion of bacteria from the urinary passages it will be advisable to combine this treatment with flushing out the urinary organs with distilled water, the catheter *à demeure*, and salol.

### AUSTRIA.

Vienna, August 29th, 1909.

#### SPUTUM DIAGNOSIS.

FALK and Tedesco recorded to the "Gesellschaft für innere Medizin" a method of diagnosis which they have confirmed in giving definite doses of salicylate of soda in the form of an oblatum. Twelve or fifteen hours later salicylic acid will be coughed up if pneumonia be present; but if acute, chronic, congestion of the bronchi, or bronchiectasis be present, no salicylic acid will be found, but pus and other products will be plentiful. In the case of pneumonia the amount of salicylic acid found will be in proportion to the intensity of the pneumonia—the more salicylic acid the more severe the pneumonia attack; with the recovery this constituent will gradually disappear. In tuberculosis salicylic acid is present, but not in the same quantity as it is to be found in pneumonia; however, in acute cases of tuberculosis the quantity is much greater than in the chronic form.

Noorden remarked that after large doses of soda salicylate he found large quantities of the acid in the joints.

#### OXYDATION AFTER HEPATIC REMOVAL.

Porges related his experiments on animals from which he had removed the liver after tying the inferior vena cava and large arteries, thus leaving the entire abdominal organs with this exception in the normal circulation. The amount of oxydation measured by expiration in the control animal was as 0.9 is to 1 in the fasting animals which represented the carbohydrate change in the muscles. Some of the experiments were as low as 0.7. When it is considered that the muscles are the only available source in a hungry animal the only reasoning left is that the albumen and fat must previously be converted into this substance by the muscles. Now, according to theory, the changes take place in the liver, which could not in this case. Embden, however, proved some time past that fatty acids in the liver were converted into acetone bodies. It is possible, however, that acetone is the intermediary product between fat and sugar, and that the liver may be the active centre of this transition. This is a theory yet to be proved. Fehling's solution reduces the acetates, but does not give the characteristic reaction of sugar, but appears to be closely allied with it. Porges further described an experiment he carried out with Dr. Salomon by extirpating the liver of a pancreatic diabetic dog where the respiration quotient was unity. This showed that the burning of sugar was not disturbed by the operation.

Noorden thought this unaltered condition of the respiratory quotient in the diabetic dog should throw more light on our treatment of diabetes in man.

#### ELECTRO-CARDIOGRAPHS.

Eppinger and Rothberger gave an explanation of the cardiographs obtained in the laboratory in testing the irritable centres of the cardia. It is not regularly distributed over the organ, as the base of the heart is almost negative. Nicolai believed there were fixed centres of excitement in the myocardia, although they might be modified by the different layers of the organ, but recent interpolating has dissipated that theory, and proved the increasing excitability increasing towards the apex. This is modified by cooling of any

part on the cardiac surface. If the surface of the left ventricle be sprayed, and a crust of ice formed, the current on this part will have a negative result; this is also true of the right ventricle. It is different, however, with the base, as the current is more active in this position than in health, although the resistance remains the same. If the heart be thawed and the muscle allowed to return to its original red condition, the reaction will be the same as at the beginning.

If the deeper parts of the heart be tested, such as the septum, a variety of results may be obtained. To perform these it is necessary to use an aqueous solution (concentrated) of sublimate or nitrate of silver, and inject 0.1 to 0.5 of a cubic centimetre to produce necrosis of the part. The result will be positive on the one side or the other, just as the pole is moved from the one side or the other. It is interesting to note that large centres of necrosis often produce negative results, while small ones are always positive; thus it is difficult to say whether the centre of irritation is more internal than external. If large necroses be produced opposite to papillary muscles of the heart, the electro curve is not altered. The trabeculae of the ventricles will determine the contraction; the left, having more circular fibres than the right, will contract in this order, while the right, having more longitudinal, will contract in its length or upwards, as experience teaches in hypertrophy and dilatation.

## LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

### THE HOME SECRETARY AND QUACK MEDICINES.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—You will, no doubt, publish a report of the question put by Captain Craig to the Home Secretary in the House of Commons, last week, and the reply it elicited. It would be easy to exaggerate the importance of this incident; easy to make too light of it. It shows, at least, that Members of Parliament are becoming alive to the facts of the fraudulent quack medicine trade, and it is satisfactory to see that these members are inclined to take up the question seriously. It is not to be imagined that Captain Craig stands alone, and will fail to gain ample support in the House, if, as may be hoped, he is determined to follow the matter up. You, Sir, are aware that I have for many years been striving to force this question upon the attention of the Legislature. It has been a depressing experience, and lately I have been taking a pessimistic view of the prospects of success. I have always held that, on humanitarian grounds alone, it has been the duty of the profession to strive to put an end to a state of things in which an army of cynical rascals is enabled to prey with impunity upon suffering humanity. The profession unfortunately possesses no political power, and no means of making its voice directly heard in Parliament. I have always held, further, that the case for legislation is overwhelming, and that laws to put an end to the worst of the abuses could be easily constructed. My pessimism is, however, now changing to optimism. If the British Medical Association will only persevere in the part in which it has lately engaged, and if you and other medical papers will continue your campaign, we must in the end obtain, by one means or the other, an exposure so full and public as shall compel the attention of Parliament. The exposure can be best made by a Royal Commission, but any Commission that does not include the quack medicine trade will be largely futile. THE MEDICAL PRESS AND CIRCULAR has already earned the thanks of medical law reformers for its persistent and consistent action in this matter during many years, and I have reason to believe that many Members of Parliament owe their knowledge of the question mainly to your paper. In continuing the work in which you have taken so valuable a part, it is desirable on occasion to keep to the front the fact that quackery, including the fraudulent nostrum traffic, is the direct cause of vast injury to the public

health. Quackery creates invalids and aggravates disease. It forms thus really a source of pecuniary gain to legitimate practitioners, into whose hands its victims sooner or later pass. If all the facts are made known, it will be impossible to impute sordid motives to the profession in this connection, or to accuse them on valid grounds of being influenced by any save philanthropic motives.

I am, Sir, yours truly,

HENRY SEWILL.

The Old Rosery, Redhill, August 28th, 1909.

[We are glad to be able to say that it is mainly due to the efforts of an old friend and supporter of THE MEDICAL PRESS AND CIRCULAR that the question referred to was put in the House, and that his request was strengthened by reference to articles in this journal.—ED. M. P. AND C.]

#### THE DECLINING BIRTH-RATE.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—I have tried to make it clear to a "Student of Sociology" that emigration, although to some degree compensatory and a temporary expedient, nevertheless as an entire scheme is, in reality, a totally inadequate means to solve the complex problem of a surplus population *plus* a declining birth-rate. May I ask, by the way, for example, whether emigration and an increasing birth-rate in Ireland have fulfilled the anticipations which your correspondent hopes for in this country?

The principle of enforced emigration at its best, which means the forcible expulsion, through unemployment, poverty, and dire necessity, of the best of our working class from their native soil, is repulsive to the great majority, who imbibe the natural instincts of their more affluent brethren and prefer to remain at home. Why, therefore, are they not at liberty to do so, and why should preparation and provision, as in other countries, not be made accordingly?

Your correspondent points to Germany, with the tantalising remark and reference to their population of 68,000,000. He may observe that the very conditions which enable that prosperous country to rear and maintain its numerous population are the very reverse to those he would land us in, because the German emigrants become less and less year by year—and why? The answer is simple—viz., they cultivate their soil. This is the keynote of their numerous population. Let us therefore follow suit as far as feasible, for it is scarcely necessary to remind your correspondent that art, science, culture, or education, however admirable from a social or civilised point of view, will not supply a community with bone and sinew—in other words, they will not produce physique (a much more valuable asset than brains at the present juncture). Let us, therefore, put forth the most strenuous efforts by hook or by crook to expand to the uttermost our agricultural resources, whereby we create constant and a never-failing source of employment. This is the only possible solution of the problem in question, and, I may add advisedly, the only means of preserving our country and Empire from inevitable decay, disintegration, and total wreck.

I am, Sir, yours truly,

CLEMENT H. SERS, M.R.C.S.

Brighton, August 27th, 1909.

#### NOSTRUMS AND INFANT MORTALITY.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—It is a remarkable and significant fact that the newspapers, with rare exceptions, invariably publish only the briefest possible reports of coroners' inquests in which the pernicious character of the quack medicine trade is exposed, and that they invariably in such cases suppress the name of any nostrum the true qualities of which are thus laid bare. Quack medicine proprietors are the most profitable customers of most papers, and the owners cannot, from the business point of view, afford to offend them. It would be a help to medical law reformers if coroners could be induced to send reports to the medical papers of all

cases of the kind, and with their own remarks in full. An inquest was held in Southwark last week at which the coroner, Dr. Waldo, evidently made some strong observations; but these are hardly more than suggested in any of the reports that I have seen. He apparently commented, first, on the fact that a mother, instead of calling in medical advice, had dosed her dying child with "teething" powders. Next he referred to the shameful fact that the Government are deriving a "rich harvest from these secret remedies." He then elicited from the chief medical witness the fact that these remedies often contained dangerous drugs, and added for himself that they were responsible for part of the high infantile mortality. A week or two ago you reported a case in which a child died from pneumonia without medical attendance, the parents having relied throughout on a widely advertised "lung cure," the most potent ingredient of which is merely treacle. Teething medicines often contain nothing more powerful than that, and confidence in them leads to many a death. When they contain anodynes they mask the symptom of pain, mostly due to improper feeding, and lead the infant quietly towards death, or to survival as a rickety cripple. If Dr. Waldo and other coroners would speak out on occasion, and take some slight pains to make their utterances public, they might easily help to put an end to much infantile misery, whilst doing a real service to the State.

I am, Sir, yours truly,

AN OBSCURE PRACTITIONER.

August 26th, 1909.

#### OBITUARY.

RADCLIFFE CROCKER, M.D.Lond., F.R.C.P.

WE regret to announce the sudden death of Dr. Radcliffe Crocker at Engelberg, Switzerland. Besides his many appointments at the principal London skin hospitals, Dr. Crocker's fame was world-wide. He was an honorary member of the American, French, Austrian, German, and Italian Dermatological Societies, physician to the skin department of University College Hospital, and a vice-president of the British Medical Association. Dr. Crocker revised the Dermatological Catalogue which is in use at the Museum of the Royal College of Surgeons at the special request of the Council.

He was born at Brighton in 1845, and received his early education in a small private school in that town. Later, while acting as assistant in a busy practice, he passed the Matriculation and Preliminary Scientific M.B. Examinations of the University of London, and thereupon entered as a student at University College, London. At the first M.B. Examination he carried off the gold medal in Materia Medica, and at the Final M.B. in 1874 he won the University Scholarship and gold medal in Forensic Medicine. In 1887 he was elected a Fellow of the Royal College of Physicians.

After holding several appointments at University College Hospital, Charing Cross Hospital, and the Brompton Hospital, he became associated with the late Dr. Tilbury Fox, and was by him so attracted by the study of diseases of the skin that he determined to devote his life to this department of medicine. For nearly thirty years he has been Physician-in-Charge of the skin department of University College Hospital.

He was the first President of the Dermatological Section of the Royal Society of Medicine, and was an honorary member of the Dermatological Societies of America, France, Austria, Germany, and Italy. He made many valuable contributions to the literature of dermatology, but his name is especially associated with his "Treatise on Diseases of the Skin," which ran through three editions. Hardly second to it in value is his "Atlas of Diseases of the Skin," which is a fine model of a scientific work.

ROBERT GORTON COOMBE, F.R.C.S.

WE regret to announce that one who must have been almost, if not quite, the oldest London surgeon has

passed away in the person of Mr. Robert Gorton Coombe, at North Kensington.

Mr. Coombe was in his 92nd year, and for many years practised at Burnham, in Essex, before proceeding to Kensington. In the Burnham district he had been an Admiralty surgeon. He was admitted a member of the Royal College of Surgeons by examination in 1841, and in 1884 was elected by the Council to the Fellowship of the college for "professional attainments."

## SPECIAL ARTICLES.

### DEPARTMENTAL COMMITTEE ON THE MIDWIVES ACT.

THE report has just been issued of the Departmental Committee appointed in December, 1908, by the Lord President of the Privy Council, "to consider the working of the Midwives Act, 1902, and in particular with reference to the supply of midwives and the cost of training, the remuneration of medical men summoned on the advice of midwives under the rules in pursuance of the Act, and the delegation of their powers by county councils under the Act." The Committee held 21 meetings, on 12 of which they sat for the purpose of hearing evidence, and they examined 37 witnesses. Of these, 13 were ladies, including eight certificated midwives, and 18 were medical practitioners.

The introductory passages of the report express satisfaction with the working of the Act, and with the extent to which it has fulfilled the objects aimed at by its promoters.

The Committee report that the extensive powers enjoyed by the Central Midwives' Board, in spite of the experimental character and somewhat fortuitous constitution of that body, have on the whole been exercised with judgment, prudence, and sympathy, and that the experience of six years has added greatly to the good will with which the Act is appraised, both by the authentic voice of the medical profession (subject to certain reserves) and by the authorities concerned in local administration. The Committee cite evidence, statistical and other, tending to show that the operation of the Act has already effected a considerable diminution both of maternal and of infantile mortality; but they refrain from insisting upon these aspects of the question until a longer time has confirmed the impressions which are now generally entertained.

Passing on from these general considerations, the report deals next with the third point of the reference to the Committee, the question of whether it is desirable that county councils should delegate to district councils their powers under the Act. This power has not been generally exercised, and in some cases county councils have wisely revoked powers thus delegated; but in a few cases where the practice still obtains it has been found to operate detrimentally to the purposes of the Act, and to introduce elements of confusion and uncertainty into its administration. The evidence appears to be conclusive upon the point; and the Committee declare that, under conditions of extensive delegation, uniformity of aim and practice are unrealisable, while the difficulties of supply, distribution, and training are enormously augmented. They therefore recommend that the power of delegation should be withdrawn, and that, in cases where it is still exercised, the delegation should be revoked.

#### SUPPLY AND TRAINING OF MIDWIVES.

On the question of the supply of midwives and the cost of training the Committee take an entirely encouraging view of the situation; and they are unanimous in rejecting the suggestion that any postponement of that part of the Act which comes into operation on August 10th, 1910, would be expedient. To the retrograde and disastrous effects of such a step witnesses of every type and representative of every interest emphatically testified. In the opinion of Miss Rosalind Paget, who appeared on behalf of the Incorporated Midwives' Institute, and who sits on the

Midwives' Board as the nominee of Queen Victoria's Jubilee Institute, it would destroy the principal stimulus to activity upon which those engaged in organisation now rely. Miss Amy Hughes declared that "it would create chaos"; and Dr. Hope, of Liverpool, thought "it would be a great mistake." In these opinions the Committee concur. From the evidence put before them they show that, excluding Wales, "from which the figures are not complete, owing to the indifference or neglect of the parties concerned," there seem to be some 15 counties, out of 50, in which a shortage is anticipated; but they regard the question as mainly one of distribution. The problem to be solved is of a partial and sporadic character, and the Committee are impressed with the belief that the solution is to be found in intelligent and effective organisation, to which all the administrative entities interested should be expected to contribute. Successive recommendations embody a large number of practical suggestions to the councils, societies, and other bodies and individuals concerned.

#### MEDICAL FEES.

On the third point of reference, that of the remuneration of medical men summoned on the advice of midwives under the rules in pursuance of the Act, the Committee had no difficulty in recognising the existence of a very real and substantial grievance affecting the medical profession. The patient under the care of a midwife is, in the majority of cases, a person in humble circumstances; and the Act enjoins that the midwife, as soon as she recognises the existence of any difficulty or source of danger, shall call in the assistance of a medical practitioner, who is then to obtain remuneration how he can. Some remarkable evidence as to the operation of this portion of the Act was placed before the Committee by Dr. Howard Jones, Medical Officer of Health for Newport, in Monmouthshire, who had addressed a circular of inquiry to the 22 medical practitioners in his locality who had been sent for by midwives in pursuance of the Act. Replies were received from 21, but data contained in one of these replies were incomplete, and are not included. The 20 practitioners whose records are given had attended 559 such cases, or an average of 27.9 patients each. Many were difficult instrumental labours, while some were minor complaints of the mother or infant. In 279 of the cases, or 49.9 per cent. of the whole, the doctor received no payment. In 62 instances, or 11 per cent., part fees were obtained, varying from 2s. 6d. to 10s. 6d., while in 218 cases the fees were paid in full. Seven medical men with over 40 cases each attended 405, in 215 of which no fees were paid, and in 23 others part fees only. One practitioner was sent for in 123 instances, and in 58 of these no fees were paid; while another received payment in only 20 per cent. of his cases. If the fees were computed at a guinea for each case, the fees earned by medical men in Newport and not received amounted to £293 19s.; while the "notices" sent by midwives to medical men have been treated as urgent, and have been attended to without reference to payment in the great majority of cases.

In view of the facts submitted to them, the Committee were unanimously of opinion that the Act should be amended by giving the practitioner summoned by a midwife in cases of emergency a secure expectation of payment; and they suggest that the local authority charged with the administration of the Poor Law should be made responsible, and should be empowered, when it sees fit, to charge the fee paid as "relief on loan" to the patient.

#### THE DUBLIN HOSPITALS.

THE Annual Report of the Board of Superintendence of the Dublin Hospitals (a) was presented to Parliament last week. The title of the Board is somewhat misleading, as it is not by any means charged with the superintendence of the Dublin hospitals in general, but only of those in receipt of Government grants.

(a) Fifty-first Annual Report of the Board of Superintendence of the Dublin Hospitals, with Appendices, for the year 1908-09. Dublin: H.M. Stationery Office, 1909.

These are nine in number—viz., three general hospitals, Dr. Steevens', the Meath, and the House of Industry; two maternities, the Rotunda and the Coombe; and four special hospitals, the Westmorland Lock, Cork Street Fever, Royal Victoria Eye and Ear, and the Royal Hospital for Incurables. Of these the Westmorland Lock Hospital is practically supported by its grant, and the House of Industry Hospitals derive the greater part of their income (£7,600 out of £11,036) from the same source. The grants to the other hospitals vary greatly, Cork Street receiving £2,500, Steevens' £1,300, the Rotunda £700, the Meath £600, the Royal Hospital for Incurables £250, the Coombe £200, and the Royal Victoria Eye and Ear £100. The grants, of course, have not any special relation to the scope or activity of the respective hospitals, and, indeed, are not planned on any system. They have been given at various times, and practically are not subjected to revision.

High praise is given by the Board to the general management of all the hospitals supervised. As far as the care of the sick in the wards is concerned, it is admirable. As regards the out-patient departments, however, the same level of excellence is not reached, the failure being due to lack of funds.

"To this part of the hospital," the Report runs, "two classes of patients come, those seeking admission into hospital, and those wanting only such treatment as can be given to them on the spot, or which can be carried out in their own homes. These are, as a rule, a most deserving class—persons anxious to remain at work, 'to be kept on their legs,' and to be on the rates as light a burden as circumstances will allow. A question that insists on presenting itself to us is this: Was the treatment of these patients all that could be desired? Was it on a level with what the patients in the wards were receiving—i.e., on a level with the ideas of the present time? We think not. The day is gone when it was thought that a bottle of medicine, however cleverly prescribed, satisfied the requirements of the majority of cases. The great improvements in hospital efficiency, in the way of meeting the requirements of the situation, the cleanliness and even elegance so noticeable in the wards, and which, for many poor souls, make a brief stay in hospital an advance in civilisation as well as in health, have not in anything like the same degree been extended to the out-patient department. At the same time we attach no blame to the various hospital authorities. The state of the intern departments is proof of their capabilities and goodwill, and had they funds no doubt all parts of the institutions under their control would be on an equal level. However, this question of dispensary practice and what is necessary to bring it to an ideal standard is so important, especially now there is question of poor-law medical reform, that we cannot pass it by in silence. It cannot be expected that dispensaries throughout the country will be worked in a fashion superior to that of the educational hospitals of the metropolis. With more funds and more co-ordination much might be done."

A comparison of the items of expenditure in the different hospitals reveals some curious contrasts. For instance, taking the item of cost of stimulants, we find that the Westmorland Lock Hospital, with an average of 57 beds occupied, spends only £1 per annum; Dr. Steevens', with 112 beds, spends £77 17s. 6d.; the Rotunda, with 91 beds, spends £3 8s. 5d. Again, the average annual cost per bed for maintenance varies from £12 1s. in the Royal Hospital for Incurables, and £15 in the House of Industry, to £20 15s. in the Meath, and £21 10s. in Dr. Steevens'. It is difficult to see why the cost of maintenance in the two latter hospitals is so much greater than in the House of Industry, a similar institution.

Appendices give particulars of the diseases treated and the operations performed in each of the hospitals.

THE International Medical Congress was opened at Buda-Pesth on August 30th with great ceremony by the Archduke Franz Joseph, who in his inaugural address dwelt on the immense services rendered by the medical profession, through individuals, to humanity as a whole.

## REVIEWS OF BOOKS.

### TUBERCULIN IN DIAGNOSIS AND TREATMENT. (a)

PROGRESS in the campaign against tuberculosis is hampered by two great difficulties, for which some solution must be found if any very considerable progress is to be made. These are, first, the very great difficulty in making a definite yet early diagnosis in cases of pulmonary tuberculosis, and, secondly, the absence of any satisfactory method of specific treatment. By early diagnosis we mean the diagnosis of a case where infection of the lungs has taken place, but where the anatomical changes are not sufficient to produce evident or demonstrable physical signs. It is while in this condition that the cure of patients may be undertaken most hopefully, but treatment is hampered by the impossibility of demonstrating the correctness of the diagnosis unless the condition of the patient becomes worse, while if one waits for the time when a positive diagnosis can be made, the time for successful treatment has too often passed. The very nature of the treatment, too, adds to the difficulty. Among the poorer wage-earners one hesitates to enforce the restrictions necessary for treatment without a positive assurance of the necessity for doing so. Then, even if the treatment is successful, and the disease arrested, there is no guarantee that the patient is not as susceptible to infection after as before the treatment. It would seem, then, that what is needed is some method of making an early yet positive diagnosis, and some method of treatment that will not only arrest the disease, but lessen the liability to subsequent infection, and a method, too, which can be employed without cutting off the patient from the means of earning his livelihood. Both these methods, if they are to be of real use, must be such as can be employed by the ordinary general practitioner. We are firmly convinced that the stamping out of tuberculosis, if it is ever accomplished, will be accomplished by the general practitioner, and not by the specialist or by special institutions.

Evidence seems to be rapidly accumulating that in the use of tuberculin such desirable methods will be found, and in the book before us an admirable review of this evidence is given. Drs. Bandelier and Roepke have not, however, remained satisfied with a review of the evidence, but have given us most elaborate yet clear instructions of how to use the methods and so accumulate evidence for ourselves. Our own experience agrees with that of our authors, and though we are not in a position to say that the case is proved, we feel the utmost confidence in the future. As regards the work before us we have nothing but praise. The instructions are simple, yet definite and practical; the facts, so far as they are known, are clearly stated, and the inferences are logically and temperately drawn. We would wish to see this book in the hands of every medical practitioner, and the methods recommended in it adopted as a regular part of his practice. We then might look forward with more hope to a successful issue in the near future of the campaign against tuberculosis. Our thanks are due also to Dr. Morland for his admirable translation of what we consider a most valuable work.

### A SYSTEM OF MEDICINE. (b)

THE present volume of this well-known System of Medicine deals with the same subjects as did the corresponding volume in the original edition, but has

(a) "Tuberculin in Diagnosis and Treatment." A Text-Book of the Specific Diagnosis and Therapy of Tuberculosis for Practitioners and Students. By Dr. Bandelier and Dr. Roepke. Translated from the Second German Edition by Egbert C. Morland, M.B.Lond., M.D.Berne. London: John Bale, Sons, and Danielsson.

(b) "A System of Medicine by Many Writers." Edited by Sir Clifford Allbutt, K.C.B., M.D., LL.D., F.R.C.P., F.R.S.Edin., Regius Professor of Physic in the University of Cambridge; and Humphrey Davy Rolleston, M.D., F.R.C.P., Senior Physician to St. George's Hospital, Physician to the Victoria Hospital for Children. Vol. v., Diseases of the Respiratory System. Disorders of the Blood. Pp. xii and 969. London: Macmillan and Co.



undergone very considerable modification. Amongst the principal changes which have been made are the following:—The article on acute lobar pneumonia and broncho-pneumonia has been re-written by Drs. Beddard and Eyre. The articles on lobar pneumonia and on chronic interstitial pneumonia have been revised by Drs. Beddard and Eyre and Dr. Fawcett respectively. Sir John Oliver has re-written the article on pneumoconiosis. Dr. Perkins has written new articles on new growths of the bronchi and on abscess and gangrene of the lung. The article on pleurisy has been revised by Dr. Horder, and Dr. Bosanquet has dealt with the diseases of the thymus gland.

The articles on pernicious anæmia, splenic anæmia, and hæmophilia have been re-written respectively by Dr. French, Drs. Hutchinson and Ledingham, and Sir Almroth Wright. New articles on polycythæmia and erythræmia, and on cyanosis have been contributed by Dr. Parkes Weber and by Dr. Garrod.

The volume consists of four parts. The first deals with diseases of the lungs, the second with diseases of the pleura, the third with the diseases of the mediastinum and thymus, and the fourth with disorders of the blood.

We congratulate the Editors on the admirable manner in which they have accomplished the task of revision, and on the distinguished contributors whose services they have obtained. The completion of their task is now within view, as only three volumes of the original edition remain unrevised.

### NEW BOOKS AND NEW EDITIONS.

The following have been received for review since the publication of our last monthly list:—

**BAILLIÈRE, TINDALL AND COX (London).**

- Surgical Anæsthesia.* By H. Bellamy Gardner, M.R.C.S., L.R.C.P.Lond. Pp. 240. Price 5s. net.  
*Diseases of the Throat, Nose, and Ear, for Senior Students.* By Wm. Lamb, M.D., C.M., M.R.C.P.Lond. Second Edition. Pp. 340, 55 illustrations and 2 plates. Price 7s. 6d.  
*Aids to the Analysis of Food and Drugs.* By O. G. Moor, M.A. Cantab., F.I.C., and William Partridge, F.I.C. Third Edition. Pp. 249. Price, cloth, 3s. 6d. net.  
*Aids to the Mathematics of Hygiene.* By Bruce Ferguson, M.A., M.D., B.C., etc. Fourth Edition. Pp. 162. Price 2s. 6d. net.

**JOHN BALE, SONS AND DANIELSSON, LTD. (London).**

- The Dental Directory, 1909.* Compiled from Official Sources. Pp. 248. Price 2s. 6d. net.  
*Synoptic Chart of Cardiac Examination.* Arranged by John D. Comrie, M.A., M.Sc., M.B., F.R.C.P.E. Price 2s. 6d. net.  
*The Campaign against Microbes.* By Etienne Burnet, M.D. Translated from the French by E. E. Austen, F.Z.S. Pp. 248. Price 5s. net.  
*Adenoids, Nocturnal Enuresis and the Thyroid Gland.* By Leonard Williams, M.D., M.R.C.P. Pp. 31.

**BOOTHROYD, ELIOT (London).**

- Low's Handbook to the Charities of London, 1909.* Pp. 248. Price 1s.

**CHURCHILL, J. and A. (London).**

- Report on Plague in the Gold Coast in 1908.* By W. J. Simpson, M.D., C.M.G., etc. Pp. 55. Price 2s. net.  
*An Atlas of Dental Extractions, with Notes on the Causes and Relief of Dental Pain.* By O. Edward Wallis, M.R.C.S., L.R.C.P., L.D.S. Price 3s. 6d. net.

**A. C. FRIELED (London).**

- The Poor Law Commission and the Medical Profession.* By A Medical Practitioner. Pp. 16. Price 1d.

**HENRY FROWDE (London).**

- The Treatment of Disease.* By Wm. Osler, M.D., F.R.S. Pp. 26. Price 1s. net.

**HENRY FROWDE AND HODDER AND STOUGHTON (London).**

- The Oxford Medical Publications. A System of Medicine.* Edited by William Osler, M.D., F.R.S., assisted by Thomas McCrae, M.D., F.R.C.P.Lond. Volume VI. Pp. 799. Price 30s. net per volume, or to subscribers 24s. net per volume.  
*Oxford Medical Publications. The Blood in Health and Disease.* By E. J. M. Buchanan, M.D., F.R.C.P. Pp. 318. Price 12s. 6d. net.  
*Oxford Medical Publications. A System of Operative Surgery.* By Various Authors. Edited by F. F. Burghard, M.S.Lond., F.R.C.S.Eng. In Four Volumes. Vol. IV. Pp. 687. Price 36s. net per volume; to subscribers, 26 net per set of four volumes.

**H. J. GLAISHER (London).**

- Lectures on Hysteria and Allied Vaso-Motor Conditions.* By T. D. Savill, M.D.Lond. Pp. 262. Price 7s. 6d. net.

**GREEN, WILLIAM AND SONS (Edinburgh and London).**

- A Theory Regarding the Origin of Cancer.* By C. E. Green. Second edition. Pp. 46.

*A Handbook of Diseases of the Nose and Throat.* By Eugene S. Yonge, M.D.Edin. Pp. 407.

**H. R. LEWIS (London).**

*Immunity and Specific Therapy.* By W. D'Este Emery, M.D., B.Sc.Lond. Illustrated. Pp. 448. Price 12s. 6d. net.

**E. AND S. LIVINGSTONE (Edinburgh).**

*Medical Fellowship, D.P.H., and Dental Examination Papers.* Pp. 288. Price 1s. 6d. net.

**MACLEHOSE, JAMES, AND SONS (Glasgow).**

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*Questions on Sick Nursing and Home Hygiene.* By D. M. Macdonald, M.D. Pp. 34. Price 6d. net.

## MEDICAL NEWS IN BRIEF.

### Quack Medicines.

THE following question by Captain Craig is contained in the Parliamentary papers: To ask the Home Secretary whether his attention has been called to the increase in recent years of the sale of quack medicines; whether he is aware that it has been proved that such nostrums frequently contain nothing but harmless drugs, coloured grease, coloured water, small quantities of aloes, pilules of sugar, etc., though advertised to cure a multitude of different maladies; whether he is aware that the chief cost of such quack medicines is in the advertising; and whether he will appoint a small Commission to inquire into and report upon the whole subject.

Mr. Gladstone: I beg to refer the hon. member to the answer on this subject which I gave to the hon. member for North Lambeth on March 12th last. I understand that inquiries are being made, at the instance of the Lord President of the Council, as to whether the practice of medicine by unqualified persons is extending, and as to the effects produced by such practice. These inquiries will no doubt throw some light on the question of the use of quack medicines, and I think it will be advisable to await their result.

### The Cholera at Rotterdam.

ON August 26th the Mayor of Rotterdam made a reassuring statement in the Town Council with regard to the outbreak of cholera. No further deaths have occurred, but over 40 people were then under observation. It is supposed that the cholera was caused by infected ballast or tank-water taken in by timber ships at Riga, St. Petersburg, or Kronstadt, and discharged by them at the mouth of the Meuse before being disinfected at the port of Rotterdam.—*Times*.

Since the above report fresh cases have appeared. Special precautions against the introduction of cholera are being taken by the Medical Officer at Hull. A notice was issued on August 25th stating that all tourists and passengers arriving from Rotterdam would be medically examined.

### Jury and Sale of Poison.

AT the Clerkenwell Coroner's Court, on August 26th, Mr. Walter Schroder held an inquiry concerning the death of a plumber's labourer, who committed suicide on August 23rd by taking salts of lemon.

Evidence was given to the effect that the deceased

was very much depressed because the woman he had been living with had gone away and left him.

A daughter, æt. 14, said that the deceased on Monday afternoon told her that he was going to poison himself, and showed her a packet of salts, labelled "poison." Later she found him mixing something in a cup. She asked him what it was, and he told her that it was an egg. She tried to take it away from him, but he ran round the table and drank it. Then he sat down on a chair and groaned, and the witness called for assistance.

The jury returned a verdict of "Suicide whilst of unsound mind," and expressed the opinion that further restrictions should be placed upon the sale of salts of lemon.

#### Medical Examination of School Children.

A LARGELY attended meeting of the Glasgow and West of Scotland Branch of the British Medical Association and medical practitioners resident in Glasgow and district was recently held in the Faculty Hall, Glasgow, to consider the terms of appointment of the school medical officers in Glasgow under the Glasgow School Board. Dr. J. Grant Andrew presided. A resolution was unanimously adopted to the effect that:—

"It was agreed to advise the medical profession in Glasgow to adhere to the finding of the Association, which is expressed as follows:—That the commencing salary of the whole time school medical officer be not less than £500 per annum, and that for junior or assistant school medical officers £250 per annum (these sums to be understood as exclusive of travelling expenses, clerical assistance, cost of stationery, postages, etc.); and for part time officers the Association recommends a system of payment which is in operation in London—viz., that the salary should be based upon the time devoted to the work, and that the minimum should be £50 per annum in respect of each school session of two hours per week."

It was stated that the salaries as at present offered to quarter time medical officers by the Glasgow School Board fell far short of the recommendation of the British Medical Association and the salaries given by other School Boards to their part time medical officers. An influential committee was appointed to confer with the School Board on this matter.

It may be explained that the schedule of the terms and conditions of the appointments issued by the School Board to applicants states that the chief medical officer, whose whole time must be devoted to the duties of the office, is to receive a salary of £500 per annum. The part time appointments, for which both men and women are eligible as candidates, provided they are duly qualified and registered practitioners, are to be for 20 weeks only, for which a payment of £40 will be made, three school periods (7½ hours) to be devoted to the work.

#### Death under Anæsthetics—West Bromwich Hospital Case.

AN inquest was held at West Bromwich, on August 23rd, by Mr. J. Clark (Borough Coroner) relative to the death of Jacob Moss (47), formerly residing in High Street, Langley, who died while under an anæsthetic at West Bromwich District Hospital. He was a perfectly healthy man. He entered the hospital for removal of an eyeball, and it was arranged to perform the operation. He was examined by Dr. Turnbull, the house surgeon, who found no indications that it would not be quite safe to put him under an anæsthetic.

Dr. Sharpe, the assistant house surgeon, who administered chloroform, said the man seemed to be going under it in a normal manner when he suddenly began to struggle violently. When this ceased and the re-administration of the chloroform began, he almost immediately collapsed. Dr. Young, who was to perform the operation, and the witness endeavoured to restore animation, but without success, and he expired in a few seconds.

Dr. Turnbull, House Surgeon at the hospital, who made a post-mortem examination of the body, said the only thing he could find to account for the man's death was slight fatty degeneration of the heart. In his opinion death was due to heart failure caused by

exhaustion due to the patient's struggling under the influence of the chloroform.

The jury returned a verdict in accordance with the medical evidence, and expressed the opinion that all proper and necessary precautions were taken by the hospital staff.

#### Patients and Pauper Attire.

DR. E. CLAUDE TAYLOR, the Medical Officer of the Hampstead Workhouse, at a meeting of the Hampstead Board of Guardians last week, presented a report, in which he stated that, in regard to a certain class of patients in the observation wards, the compulsory wearing of workhouse attire militates against their recovery. This he had found was particularly so with females of the educated class, who are at times brought in on account of urgent mental trouble, but who would not, on any other ground, be classed as paupers. He suggested, therefore, that in any case where, in his opinion, this rule is prejudicial to the patient, he might direct that the patient's private clothing (of course, of a plain character only) be supplied for wear while the patient is up.

#### An Ode for the International Peace Congress.

OUR *confrère*, Dr. Macnaughton-Jones, having been invited by the President as Medical Representative of the Irish Association (in London) at the Congress being held at Stockholm this week, has composed the following ode, to be read in his unavoidable absence:—

"To raise aloft the lamp of all-pervading peace,  
And with its rays to light the path that He foretold  
Of that goodwill 'mongst men, when senseless strife  
should cease,  
And nations hate, that owes its cursed rise to greed  
of gold,  
Or through the jealous passions roused by rival claim  
To some bare strip of envied soil; to stem the tide  
Of ruthless lust for neighbours' blood—be this your  
aim.  
Nor halt because of those who would such hopes  
deride.

That man may yet above incensate thirst for blood  
And brutal passion rise, were surely nobler goal  
Than usage of his mental powers in wasteful feud.  
Is this the final message to the human soul—  
Distrust, suspicion, all that lying tongues can do  
To fan the lurid flame of war for selfish ends,  
And thus with rashness wild its own destruction woo?  
To compass this, its aid, the march of science lends.

In death and want, despair's unmeasured depths, and  
grief  
Too deep for words, we see the offspring weird of war.  
To win in such a cause and thus to bring relief  
To overburdened millions of the race were far  
The noblest task to set the human mind to solve.

There are who preach the use and worth of war and  
tell

Us that it teaches duty's claim and high resolve!  
Is there no other road save through the gates of Hell?  
By which this sacrifice of self or life we reach,  
Were that the highest price of Duty's stern demand?

Not thus does all the past of human story teach  
Through unrequited deed in every clime and land,  
That has its lasting record on the scroll of time,  
When Conscience cried for faith or Freedom raised  
her voice.

And *that* the world will ever hold the meanest crime  
(Nor deem there's left to man or nation other choice  
Than to resist should this clear issue be in sight)  
The cowardly yielding up a cause that has its claim  
Before ought else in Reason, Justice, Truth, and Right.

To bring all these to bear by friendly act—prevent  
The hostile move that leads to war, and bar the way  
To future strife, invasion's scare, is the intent  
And purpose noble of the guests who meet to-day  
On Northern soil, in Sweden's Scandinavian town;  
That ancient city on the isles, and welcomed there,  
The very fount of chivalry and past renown;  
This greeting Ireland sends and every wish that's fair.

H. MACNAUGHTON-JONES.

## NOTICES TO CORRESPONDENTS, &c.

OUR CORRESPONDENTS requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

### SUBSCRIPTIONS.

SUBSCRIPTIONS may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s.; post free at home or abroad. Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially-appointed agents. Indian subscriptions are Rs. 15.12. Messrs. Dawson and Sons are our special agents for Canada.

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OPHTHALMOLOGIST (Exeter).—The importance of the newly-founded Congress of Ophthalmology at Oxford is obvious. If desirous of membership, you should communicate with one of the Honorary Secretaries. We imagine the fact that you are engaged in general practice should prove no bar to membership, providing you take special interest in diseases of the eye.

DR. J. O. (London).—Your valuable monograph evidently represents an enormous amount of research and observation. In its present form, however, it is unfit for publication in our columns. We will carefully consider both the possibility and the advisability of presenting it in a more condensed form, and will communicate with you later.

MATRON (Bournemouth).—The remedies you mention are all simple and efficacious. We should advise great caution, however, in dealing with nurse's ailments, as we have known most serious results from the early mismanagement of acute attacks.

T. A. L. (Leitrim).—Your view is undoubtedly the correct one. A number of journals and magazines exist only by the advertisements of quacks. As the latter extort monies from the credulous by false pretences they are committing a legal offence, while editors who aid and abet them in their wrongdoing become accessories. When the police can be induced to recognise and act upon this remorseless logic we shall see the first effective blow struck against the enormous evil of the quack medicine trade. The wealthiest and best known journals are often the greatest offenders.

## Appointments.

BAKER, M. W., B.A., B.C.Cantab., M.R.C.S., L.R.C.P., Resident House Physician to St. Thomas's Hospital, London.  
BROADBENT, F., M.R.C.S., L.R.C.P., District Medical Officer of the Newark Union.  
BUDD, A., M.B., B.S., Medical Officer of Health of the Borough of Launceston.  
BURRELL, L. S. T., M.A.Cantab., M.R.C.S., L.R.C.P., Resident House Physician to St. Thomas's Hospital, London.  
COX, R., B.A., B.C.Cantab., M.R.C.S., L.R.C.P., Resident House Surgeon to St. Thomas's Hospital, London.  
FYFFE, E. L., M.R.C.S., L.R.C.P., Junior Obstetric House Physician to St. Thomas's Hospital, London.  
GARRETT, R. R., M.R.C.S., L.R.C.P., District Medical Officer of the South Stoneham Union.  
HALLOWES, K. R. C., M.B., B.S.Dub., Certifying Factory Surgeon for the Bellanagh District, co. Cavan.  
HIGGINS, T. S., M.R.C.S., L.R.C.P., Assistant Medical Officer of Health, City of Birmingham.  
HARMENS, W., B.A., B.C.Cantab., M.R.C.S., L.R.C.P., Resident House Surgeon to St. Thomas's Hospital, London.  
HARPER, P. T., M.R.C.S., L.R.C.P., Senior Obstetric House Physician to St. Thomas's Hospital, London.  
LLOYD, Brinley L., M.B., B.S.Lond., Medical Inspector of Schools at Sheffield.  
MACKAY, D. Matheson, M.D., C.M.Edin., M.R.C.S.Eng., L.R.C.P. Lond., Honorary Assistant Ophthalmic Surgeon to the Hull Royal Infirmary.  
MCDONALD, J. M.B., C.M.Edin., District and Workhouse Medical Officer of the Belford Union.  
MENNELL, J. B., M.A., M.B., B.C.Cantab., M.R.C.S., L.R.C.P., Resident House Surgeon to St. Thomas's Hospital, London.  
PERRY, L. B., B.A., B.C.Cantab., M.R.C.S., L.R.C.P., Resident House Physician to St. Thomas's Hospital, London.  
PARSONS-SMITH, E. M., M.R.C.S., L.R.C.P., Ophthalmic House Surgeon to St. Thomas's Hospital, London.  
RUSSELL, R. F., M.B., Ch.B.Aberd., Certifying Factory Surgeon for the Ollaberry District, co. Zetland.  
SCALES, F. Shillington, M.D., B.C.Cantab., Honorary Medical Officer in Charge of the Electrical Department at Addenbrooke's Hospital, Cambridge.  
THORNTON, G. E., M.A., M.B., B.Ch.Oxon., Resident House Physician to St. Thomas's Hospital, London.  
WAINWRIGHT, G. B., B.A.Cantab., M.R.C.S., L.R.C.P., Resident House Surgeon to St. Thomas's Hospital, London.  
WILSON, H. B., B.A.Cantab., M.R.C.S., L.R.C.P., Resident House Physician to St. Thomas's Hospital, London.  
WYNN, FREDERICK E., M.B., M.Ch.Dub., Medical Officer to the Borough of Leigh, Lancashire, at a salary of £400 per annum.

## Vacancies.

Royal College of Surgeons, Ireland.—Professorship of Anatomy. Election October 7th. Applications to the Registrar. (See advt.)  
Oldham Union.—Resident Medical Officer. Salary £150 per annum, with rations, furnished house, washing, and attendance. Applications to Horace A. Quarby, Clerk to the Guardians, Union Clerk's Office, Rochdale Road, Oldham.  
Southwark Union, London.—Assistant Medical Officer at their Infirmary, East Dulwich Grove, S.E. Salary £100 per annum, with board, lodging, and washing. Applications to Sydney Wood, Clerk, Union Office, John Street West, Blackfriars, S.E.  
Leeds Public Dispensary.—Junior Resident Medical Officer. Salary £100 per annum, with board and lodging. Applications to the Secretary of the Faculty, Public Dispensary, North Street, Leeds.  
Dewsbury and District General Infirmary.—House Surgeon. Salary £100 per annum, with board, residence, and laundry. Applications to Edward Hemingway, Secretary.  
Great Yarmouth Hospital.—House Surgeon. Salary £100 per annum, with board, lodging, and washing. Applications to Richard F. E. Ferrier, Hon. Secretary, 35, Hall Plain, Great Yarmouth.  
Nottingham General Dispensary.—Two Assistant Resident Surgeons. Salary £160 each per annum, with apartments, attendance, light, and fuel. Applications to C. Cheesman, Secretary, 12, Low Pavement, Nottingham.  
Yorks Dispensary.—Resident Medical Officer. Salary £130 a year, with board, lodging, and attendance. Applications to Dr. Swanson, The Pleasaunce, Heworth, York.  
Parish of Bermondsey.—Second Assistant Medical Officer, Infirmary and Casual Wards, Lower Road, Rotherhithe, S.E. Salary £100 per annum, with rations, washing, furnished apartments, and attendance. Applications to E. Pitts Fenton, Clerk, 283, Tooley Street, S.E.  
Wolverhampton and Staffordshire General Hospital.—Resident Surgical Officer. Salary £125 per annum, with board, lodging, and laundry. Applications to J. Stephen Neil, House Governor and Secretary.  
Queen's Hospital for Children, Hackney Road, Bethnal Green, E.—Resident Medical Officer. Salary £100 per annum, with board, residence, and washing. Applications to the Secretary.  
Ashton-under-Lyne Union.—Assistant Medical Officer. Salary £100 per annum, together with rations, laundry, and residence. Applications to G. H. Partington, Clerk to the Guardians, Poor-Law Office, Ashton-under-Lyne.  
School Board of Glasgow (Medical Examination of School Children).—Chief Medical Officer. Salary £500 per annum. Applications to J. Clark, Clerk to the Board, School Board Office, 123, Bath Street, Glasgow.

## Births.

ALDRED.—On August 24th, at Lanbevor, Wroxham, the wife of Wilfrid A. Aldred, M.R.C.S., of a daughter.  
ELLIS.—On August 24th, at 208, London Road, Leicester, the wife of L. Erasmus Ellis, M.D., of a daughter.  
FOSTER.—On Aug. 26th, at Woodgate House, Wimbledon, the wife of Arthur L. Foster, Royal Army Medical Corps (nee Summerhays) of a son.  
PAIN.—On August 26th, at Montagu House, Leatherhead, the wife of Basil H. Pain, M.B., M.R.C.S., of a daughter.  
SMITH.—On August 24th, at 31, London Road, St. Albans, the wife of James Johnston Smith, M.B., Ch.B., of a daughter.  
STAMM.—On Aug. 27th at 43 High Road, Streatham, the wife of Louis Edward Stamm, M.D., of a son.

## Marriages.

BRENNER-CADBURY.—On August 25th, at St. Barnabas' Church, Bethnal Green, London, Frederick Perthes, Brenner, M.B., C.M., of 12, Lower Clapton Road, son of William Brenner, of Barrie, Ontario, Canada, to Agnes Elsie, daughter of the late Henry Cadbury, of Birmingham.  
ROWLANDS-BARNESLEY.—On Aug. 28th, at Sandon Road Wesleyan Church, David R. Rowlands, M.D., C.M., F.R.C.S.E., D.P.H.Lond., to Mabel Lillian, elder daughter of Edward W. Barnesley, Pimbury, Edgbaston.  
SHEARD-WYATT.—On August 16th, at St. Paul's Church, Cliftonville, Margate, Dr. W. F. Sheard, of Putney, son of the late Rev. W. D. Sheard, M.A., Cantab., to Jeanie Watt, adopted daughter of the late Joshua Taylor, of Putney.

## Deaths.

BOWES.—On August 27th, at East Hill House, Herne Bay, John Bowes, M.R.C.S.Eng., L.R.C.P.Lond., age 75.  
BOYD WALLIS.—On August 25, at 21, St. James's Road, Wandsworth Common, London, Charles James Boyd Wallis, L.D.S., R.C.S.Eng., in his 64th year.  
CROCKER.—On August 22nd, at Engelberg, Switzerland, Henry Radcliffe Crocker, M.D., F.R.C.P., of 112, Harley Street, London, and Bransridge, Bucks.  
FERGUSON.—On August 27th, at Loftus House, Broughty Ferry, James Maxwell Ferguson, M.D., sometime of Port Maria, Jamaica, in his 92nd year.  
GRANGER.—On August 22nd, suddenly, at a nursing home, Leeds (of appendicitis), Harry Maxwell Granger, M.B., Ch.B., aged 23, youngest son of the late Dr. John Ross Granger, of Glasgow.  
HOOPER.—On Aug. 25th at 19 Midvale Road, St. Helier, Jersey, Lucas George Hooper, A.M.D., aged 77. Deeply regretted.

# THE MEDICAL PRESS AND CIRCULAR.

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WEDNESDAY, SEPTEMBER 8, 1909.

No. 10.

## NOTES AND COMMENTS.

**A Scotch Diploma in English Practice.** FOR many years the qualifications of the Scotch Colleges have been popular amongst the English and Irish. At one time the standards of examination were somewhat less exacting than those of England and Ireland, but nowadays all that is changed. Then came the time when the triple qualification was created by the merging of the diploma of Edinburgh and that of Glasgow into the triple qualification of L.R.S.Edin., L.F.P.Glas. Within the past year or two, however, the popularity of the qualification has distinctly waned. The cause is not far to seek, and arises mainly from the short-sightedness of the Colleges concerned. The root of the matter is that the medical man who starts practice in England with a licentiate or triple qualification finds himself seriously handicapped in the struggle with competitors, the majority of whom hold the membership of the Royal College of Surgeons of England. The mischief is emphasised by the fact that in some mysterious way the public generally have come to the conclusion that the one diploma is inferior to the other. The question anyone purposing to practice in England will ask himself in future is whether it is worth his while to go to Scotland for his education, and for a qualification that will not furnish the most advantageous equipment for his life work? The attractions of the Edinburgh teaching will be probably outweighed in his mind by the lesser value of a licentiateship qualification when compared with a membership.

**The Scotch Colleges and their Diplomates.** THE point was pressed upon the Council of the Edinburgh Royal College of Surgeons some years ago by the Association of Medical Diplomates of Scotland, but an unfavourable answer was returned to their formal petition for the creation of a membership diploma. In this refusal we fear the College committed a great mistake in policy. There would probably have been little difficulty in effecting the desired change, for, as pointed out recently by a correspondent in THE MEDICAL PRESS AND CIRCULAR, the Medical Act of 1856 expressly refers to the members and Fellows of the Royal College of Surgeons of Edinburgh. The indifference to the interests of its diplomates thus shown by the Council can hardly fail to react adversely upon the future advent of students. The Council, adhering to the selfish and worm-eaten traditions that govern the sister English Colleges, keep their government in the grip of the higher diplomates, to the exclusion of licentiates. The rôle of the licentiate is simply to pay his fees to the Registrar, and thenceforth he is dead, so far as the

Council is concerned, unless, indeed, he commits some gross breach of social or professional law. It is not yet too late for the Edinburgh College of Surgeons to listen to the voice of reason, which has partially prevailed in the Glasgow College.

**Sir Henry Burdett and the Anti-vivisection Hospital.** LAST week philanthropic London was startled by the announcement that the Hospital Sunday grant of £95 had been rejected by the Anti-vivisection Hospital. As readers may remember, the grant was made only after public protest at the Mansion House and elsewhere by the excluded hospital. The reasons for the rejection of the grant are rendered apparent by a correspondence that has been going on between the secretary of the hospital and Sir Henry Burdett. We are bound to say that, considering the terms in which the grant was made and the attitude and language of Sir Henry Burdett, no self-respecting public body could have done otherwise than reject patronage bestowed in so offensive a manner. The principles involved in the whole proceeding are so important to the public and to the medical charities, that it is desirable to examine somewhat more closely the details of the present sorry squabble. First of all, we may disclaim all sympathy of any kind with the methods of the Anti-vivisection Hospital. The faith they profess is to us abhorrent, stupid, injurious, and logically indefensible. But, for all that, they have their rights as representing a section of medical opinion that is permitted by the State legally to put in practice its particular views—however grotesque and repulsive they may be to followers of orthodox medicine.

**The Terms of the Concession.** SIR HENRY BURDETT clearly shares our views as regards the utter foolishness and worthlessness of the anti-vivisection creed. But he has done much more than that, for he has not hesitated to plead justification for the extremely harsh words, "pretentious humbug," applied by himself to the hospital methods at a public meeting. Now, what Sir Henry thinks in his own mind is one thing, and what he says in public as a leading spirit in the Hospital Sunday Fund is another. As things stand, it must be inferred that Sir Henry Burdett is the official spokesman for the Metropolitan Sunday Fund. A more undignified, unworthy and scurrilous attack upon a charitable organisation from a responsible member of a great public body it would be difficult to conceive. The Fund, apparently acting under the pressure of criticism at the Mansion House and elsewhere, made a grant to the Anti-vivisection Hospital. The concession was actually supported

by Sir Henry Burdett, who seconded the vote at the Mansion House, but, nevertheless, at the same time accused the hospital of "pretentious humbug," and expressed a hope that they would "mend their ways" and "fall in line with the best-administered hospitals of the country."

THE situation thus disclosed is an extraordinary one. The Sunday Fund having made a grant to a particular hospital, one of its Council members makes an insulting public attack on the institution, and follows it up by discussing the medical views of the hospital, and raking up a series of undignified recriminations in the philanthropic journal which he edits (*Hospital*, August 28th, 1909). Why, it may be asked, if heterodoxy be so great a rock of offence to Sir Henry Burdett, does he not oppose tooth and nail the grant to the Homœopathic Hospital? To us, as orthodox medical men, the cult of homœopathy is no whit more rational or defensible than that of anti-vivisection. The real issue appears to be that the Anti-vivisection Hospital is one of the small hospitals which the Hospital Sunday Fund and Sir Henry Burdett have long ago banned with bell, book and candle. One has only to glance at the smaller institutions of long and honourable history—tainted by no heterodoxy, and by no shadow except that of prolonged penury—to recognise the bitterness of the spirit that has decreed the extinction, if possible, of the smaller London hospitals.

THE root of the mischief lies in the An Autocratic constitution of the Fund. In a small administrative and absolutely irresponsible Council it is inevitable that the policy of the Fund should sooner or later drift into the hands of one or two members. There is no effectual control of the Fund by the public whose money it administers, a principle that is absolutely out of touch with modern views of the just economic relations of a great public trust. In the present instance, when a policy is insisted upon at the annual general meeting of the Sunday Fund—the only opportunity of united criticism of the management that is available—we find the decision of the meeting contemptuously handled by a prominent member of the Council, whose views are tacitly endorsed by his fellow-members. The whole situation is a burlesque upon the formally recognised machinery of modern public life. Until the constitution of the Metropolitan King Edward and Sunday Funds is altered, so that it becomes representative of all classes, including the hospitals themselves, the subscribers, the general public, and the medical profession, we are likely to be faced from time to time with a spectacle such as the present sordid squabble, from which the Fund certainly is not likely to emerge with any added lustre.

THE *Times* last week published two letters on this subject, both in their own way admirable and suggestive, the first from Sir Oliver Lodge, the second, in reply, from "M. D." Sir Oliver Lodge points to the fact that physical science is progressing too fast for the uneducated or semi-educated to follow, and the result is a tendency manifested in the Press, and even in the *Times*, to stigmatise the latest results as mere speculation. He explains that scientific theories are not speculations at all, but rather deductions from definite data. Speculation he defines as "guessing beyond any substantial founda-

tion," and when physicists speculate, "they unmistakably say so." It takes a generation or two for conclusions to sink into the popular mind, and then they are accepted, not so much by comprehension as by habit. Sir Oliver Lodge points out that the fact that the man-in-the-street lags hopelessly behind is a serious matter. The public have a monopoly of the sinews of war—money—and unless they can be made to understand the importance of pure science, and made willing to provide funds for its pursuit, the tendency of England to lag behind will increase, and one will fall back in the applications also. Sir Oliver clearly indicates the discouragement which present conditions impose upon workers in pure science, and pleads for more respect for the utterances of leaders in science. "M. D." shows how helpful it would be to the man-in-the-street if he could have scientific work set out for him like a railway plan, marking (1) lines completed; (2) lines under construction; (3) lines projected.

HE suggests that the confusion in the popular mind might thus be mitigated, especially if scientific men would all agree to get on with lines under construction, and not present so many that are merely projected as if they were completed. We have over and over again insisted that the only way to increase respect for the appreciation of science, lies in including a due proportion of science in our system of education from top to bottom. Everyone is a man-in-the-street in regard to some branch of science, but when properly educated he knows what to accept and what to reject. He accepts conclusions when satisfied that if he himself were to work out the research he would arrive at the same result; and he believes in conclusions when aware that the theories have been tested by scores of independent workers, an event that always speedily follows publication of the details of a research and its results. We must all accept authority in many matters of scientific fact; what the man-in-the-street needs is the power to distinguish between the real authority and the false pretender. The ignorant public need guidance. This they will never get sufficiently, so long as a large proportion of otherwise educated and cultivated men, who ought to be their leaders, are totally devoid of knowledge of science and of scientific methods. That this is at present the case in these islands is a fact constantly being exemplified in these pages, especially in relation with real medical science and its fraudulent counterfeits.

FOR the sake of the public it is to be regretted that the newspaper reports of the Congress and from the International Medical Congress at Budapest seem to be furnished by non-medical correspondents. It is only by collating reports, and reading between the lines, that an approximately correct interpretation can as a rule be arrived at, and by this method it is possible perhaps to describe what took place at the discussion on appendicitis which occupied the Congress on Thursday and Friday last. A large number of well-known surgeons, physicians, and obstetricians took part, and they divided themselves into three groups—those favouring operation in all cases, those for operation in selected cases, and those for no operation at all. According to the *Times*, which as usual provides by far the best reports, Dr. Lenhartz, of Hamburg, and Dr. Bourget, of Lausanne, were champions of the last named view. They asserted that by internal treatment, good nursing, and starvation, they had been able to show a lower mortality than the surgeons could show. The consensus of opinion

Science and  
the  
Man-in-the-  
Street.

The Medical Congress and from the International Medical Congress at Budapest seem to be

was, we are told, "against radical measures," and the practice of making an exploratory incision to determine whether an abscess had formed or not was condemned by most speakers. Dr. Sonnenburg, of Berlin, supported by many surgeons, agreed in favour of operation; but viewing the discussion in its entirety, it appears that the general opinion was that surgeons had operated too much in the past, and had now received a check.

#### A Medical Explorer.

THE interest felt by the civilised world in the great achievement of reaching the Pole will be increased in the case of the medical profession by the reflection that it is a medical man who has succeeded where so many failed. Dr. Frederick Albert Cook is a man of 45 years of age, a native of Brooklyn, and a graduate in medicine of New York. According to the *Jewish World*, he is descended from a well-known Frankfort family of the name of Koch. He began his exploring work in 1891, when he acted as surgeon to Peary's Arctic expedition. Again, in 1897, he undertook similar work as surgeon to the Belgian Antarctic expedition. More recently he did valuable work on his own account in the exploration of Alaska, and his description of his travels there was published not long ago. He showed himself an intrepid and determined adventurer, and, simple as his plan of reaching the Pole seems when the feat has been accomplished, yet it required considerable wisdom and courage to decide on such an original scheme and to carry it out in the face of all obstacles. The endurance which Dr. Cook was called upon to show must have been extreme, when, as he says, for days life was a torture. We join in the universal felicitations of our illustrious *confrère*.

#### The Health of Paris and London.

IN the course of the discussion of the Housing and Town Planning Bill in the House of Commons last week, an interesting comparison between the sanitary conditions of Paris and London was presented by Mr. John Burns. He clearly proved by statistics the superiority of London. The test of good sanitary administration, and of the condition of the mass of the people, is, of course, the death-rate; and the absence of consumption is equally significant. The death-rate of Paris ranges between 18, 19 and 20; the death-rate of London, which is twice the size of Paris, is 13.8, from 20 to 30 per cent. lower than that of Paris. The deaths from consumption in Paris for a year were 9,500, whilst only 9,176 died in London, in spite of its vastly greater population, from that disease. No less than 8,000 of the total deaths from consumption in Paris occurred in one area of contaminated houses. Paris is the most magnificent city in Europe from the æsthetic point of view. Every Parisian is willing to make any sacrifice to preserve and enhance the artistic qualities of his beloved city; but up to late years the inhabitants and their representatives, the municipal authorities, have been singularly lax regarding all those things to which the practical (and Philistine) Londoner has given most thought. In the housing of the people, imperfect as this may still be in many respects, in drainage, in water supply, in hospital isolation accommodation for infectious diseases, and in measures for dealing with consumption, London is far in advance of *la ville lumière*. Beneath its outward show of beauty, Paris conceals a vast number of foul plague spots such as are not to be discovered in anything like such a quantity behind the ignoble architecture of the meanest and most ill-looking of London streets.

## PERSONAL.

HIS MAJESTY THE KING has honoured Dr. Ott, of Marienbad, with an invitation to a private visit at Sandringham during the coming winter.

It is officially announced that the King has approved the appointment of Dr. Thomas H. Bryce, Lecturer in Anatomy in the University of Glasgow, to be Regius Professor of Anatomy in the University, in succession to Professor John Cleland, resigned. Dr. Bryce, who is a cousin of the British Ambassador to the United States, has been Lecturer on Anatomy at Queen Margaret College, Glasgow, since 1892.

A HANDSOME motor-car was last week presented by his fellow-citizens to Dr. R. Arthur Pritchard, Chairman of the Carnarvon County Council, and many times Mayor of Carnarvon.

MR. JOHN MARNOCH, M.A., M.B., C.M., Surgeon to, and Lecturer on Clinical Surgery at, the Aberdeen Royal Infirmary, has been appointed Regius Professor of Surgery in the University, in succession to Professor Alexander Ogston, who has resigned.

It has been calculated that about 4,000 members of the profession assembled last week at the International Medical Congress at Budapest. Of these, there were only fifteen women, four of whom were English and six American. All other nationalities combined, therefore, produced but five representatives of female practitioners.

THE funeral of Dr. John Milne Dalrymple, who died as the result of a cycle accident, as reported in our last issue, took place on August 30th at Edinburgh. Simultaneously a memorial service was held in the chapel attached to the Birmingham Infirmary, where Dr. Dalrymple had been until recently on the resident medical staff.

DR. H. RADCLIFFE CROCKER, Physician to the Skin Department of University College Hospital, whose death in Switzerland was announced in our last issue, has left estate valued at £17,778 gross, with net personality £15,328. He bequeathed to the Medical School of University College Hospital his drawings, sketches, diagrams, atlases, and books relating to diseases of the skin.

THE Council of the University of Birmingham has decided to confer a number of honorary degrees upon distinguished persons in connection with the recent opening of the new University by the King and Queen. Among the medical men thus honoured are Mr. Henry T. Butlin, F.R.C.S.; Sir Richard Douglas Powell, M.D.; and Dr. Wardle, F.R.S., the respective Presidents of Royal Colleges, and Mr. Charles S. Tomes, F.R.S., F.R.C.S., the President of the British Dental Association.

JACQUES ANTOINE REGNIER, a young doctor, æt. 21, died last week in Paris from blood poisoning caused by pricking his finger while conducting a post-mortem examination at the Necker Hospital. A few hours before he breathed his last he told those around his bed not to give way to grief. "I die like a soldier on the battlefield," he said. "When you take up the medical career you are aware of these dangers, and must be ever ready to face them."

LAST week it was announced from Copenhagen that an American medical man, Dr. F. A. Cook, had reached the North Pole, unaccompanied by any white man, on April 21st, 1908, while on a Polar expedition. Dr. Cook, who was born in Sullivan County, State of New York, in 1865, served as surgeon and ethnologist to the Peary Expedition in 1891-2, and has served in various capacities in other expeditions, and is President of the Explorers' Club of New York. According to the *Jewish World*, he is descended from a well-known Frankfort family of the name of Koch.



## EDUCATIONAL SUMMARY FOR 1909-10.

### INTRODUCTORY REMARKS.

#### CHOICE OF A CAREER.

THE choice of a career is the turning-point of the life of those whose career has not been pre-ordained by fortune or by sheer stress of circumstances. Of all the professions, medicine may claim to be the most learned, as it is the most catholic and liberal. There are few branches of scientific work that may not sooner or later be pressed into the service of scientific medicine, or, at the very least, may be the cause of fresh pathological phenomena that demand the ministrations of curative skill. Instances abound. Who could have prophesied that the researches of Crookes upon the passage of electric currents through high vacua would have given to surgeon and physician a generation later the marvellous wonder of the Röntgen rays? With that discovery came the curious form of traumatism known as X-ray or focus-tube dermatitis, which played such havoc amongst the pioneers in Röntgen-ray work, and the precise nature of which is not yet fully known. Truly this fragment of modern medical discovery, this romance of the laboratory, this outstanding symbol of intellectual progress and achievement, may well serve to kindle the fire of enthusiasm in the breast of the youth who is entering upon the formal study of medicine. And what has been true in the past is true to-day, and ever will be true—that no man knoweth the reward that may come to him in the shape of some great discovery that may reduce the vast sum of human misery, if only he labour patiently and observe and reason with absolute candour and exactitude. Yet it is given to many of the best workers in medicine to spend their whole lives in laborious toil and to have no crown of honour, of wealth, or of renown. There is no more pathetic thing to be seen in the whole tragedy of human life than the patient, unrequited toil of the man who has given up his whole life to the earnest search after truth.

It will be well for the student, and still more so for the intending student, to grasp the fact that medicine as a profession does not bring fortune to its followers. A mere living is sooner or later within the reach of most medical men, but, compared with other professions, the road to competency is getting harder and harder, competition is great, and the State does not hesitate to avail itself of medical services gratuitously, as in the recent legislation which made the notification of births by medical attendants compulsory (failing certain other specified persons), but which made no provision for the payment of a fee for the certificate. In the past the State fastened a similar unpaid and responsible duty upon the practitioner by requiring him to sign death certificates without fee. One day it is to be hoped that the medical profession will organise sufficiently to become a power in the State. The medical student will do well to give some consideration to matters of this kind that are outside his curriculum, for he will find himself one day brought face to face with a number of unpleasant experiences in actual practice.

Of all the influences that direct prosperity from the door of the medical man, there are none at all comparable with those of quack practice and quack medicines. The law that insists on a full curriculum for the medical student, and upon his passing carefully

regulated standards of examination before he receives a qualification to practice, stops at that point. It is permitted to Dick, Tom, and Harry to set up at their own sweet will as skin, eye, and nerve specialists, as cancer curers, bone-setters, or any other branch of pseudo-medical practice they may choose, without having a single scrap of medical knowledge. Of late the General Medical Council has been making inquiries, and has induced the Government to take the matter up to some extent. Except for that action, no medical body had ever attempted to defend the medical profession, not to mention the public, against the terrible abuses that are inseparable from the wiles of the charlatan and the fraudulent lies of the quack medicine vendor. In no other path of modern life is fraud permitted to stalk brazenly through the streets, but in the case of these parasites of society, usage appears to have conferred a species of immunity.

But though there are rocks ahead in the career of medicine, the same thing is true of all walks of life. The earnest student who is content to look forward to a life spent in the service of his fellows, and is content with rewards that are those of the virtuous rather than of the acquisitive mind, may turn to his work with confidence for the future. Wherever his lot may be cast, it will be possible for him to make scientific observations that may prove of incalculable benefit to mankind. Medical men are never weary of the story of Jenner and vaccination. Nor, in truth, in the whole history of medicine can there be a more striking instance of brilliant inductive reasoning than that which established the practice of vaccination. Later discoveries have placed the work of Jenner on a more and more secure basis of ascertained fact. So far as absolute demonstration of the truth of his views as to the preventive value of vaccine are concerned, sufficient evidence is forthcoming to satisfy any but the stubborn incredulity of an anti-vaccinationist. The sole factors wanting to a scientific solution of the whole question are the identification of a specific small-pox organism, and a fuller understanding of the nature of immunity. Meanwhile, the scourge of small-pox has been practically driven out of the United Kingdom by the empirical observations of a country surgeon. That fact is encouraging to those who are content to carry on their profession with devout sincerity and belief in the nobility of their work. At the same time, it must not be forgotten that there is a material side to the question, and that medical men in common prudence should defend their interests with regard to fees, and to the many encroachments upon their legitimate field of practice, which, of late years, have reduced incomes in many cases well-nigh to vanishing point. What would have been the position of Jenner if poverty had driven him to give up his practice and take to another calling? Yet that is precisely what is taking place with the present-day Jenners, and with this remark we conclude our introductory section. The public is deluded into wasting its money upon quacks and charlatans, who work incalculable evil in return. The remedy for this state of affairs rests with the medical profession, who cannot hope for fair treatment at the hands of the outside world until they set their own house in order by the reform of the medical corporations, and of the General Medical Council.

## CHOICE OF A SCHOOL.

Many influences combine to make for the choice of a school. Tradition, family influence, proximity, means, and acquaintance with other students or members of the staff all come into play, and there are few who are not affected by them. The would-be student, however, who has the whole collegiate domain open to him and his selection unhampered by any consideration than that of merit, has the choice of nearly twenty centres at which to follow his bent. As practically all these establishments and schools are badly off for money, and not too rich in students, he may calculate on finding himself welcomed wherever he finally decides to go, which is indubitably an advantage at the outset of a career. There is, as a rule, a certain tendency for a man to look to his immediate vicinity for the maturing of his genius, and in these days, when Universities are cropping up with bewildering prolixity, most students will probably find one within fifty or sixty miles of their homes. As the medical curriculum is laid down carefully by the General Medical Council, there is not much variation in that of the individual schools, and a good all-round education can be relied on in practically every one. On the other hand, some have teachers of established ability and reputation, whilst others are seeking to obtain that enviable notoriety, and while some men may be attracted by the spirit of adventure to cast in their lot with the new and struggling, others will prefer the security of well-trodden paths. The object of this number of *THE MEDICAL PRESS AND CIRCULAR* is to present impartially the claims and attractions of all schools, and if parents and their wards study its pages carefully they will, we feel sure, be convinced that there are none that have not their own special charms. The outlay on actual necessary educational expenses does not differ very materially in different places, the higher cost of certain centres being chiefly due to the greater cost of living. It is obvious that in London, for instance, where rents are high, the cost of lodgings must be considerably more than in many smaller and less favourite towns, while, on the contrary, a student living in his parents' home in London will not be so much expense to them if he goes to a London Hospital as if he takes up his abode at a northern University. But, other things being equal, it is important for the average student to choose that school at which he is most likely in after years to obtain a resident post.

## CHOICE OF A QUALIFICATION.

One day, in the not very distant future, we hope, the choice of what qualification to study for will not present so great a difficulty as it does to-day. Owing to the haphazard way in which British institutions and customs grow up, there have come into being a number of rival interests, both pecuniary and scholastic, which it is very difficult to break down, with the result that students are offered all sorts of qualifying diplomas, conferring on them the right to append almost every conceivable alphabetical combination to their names. It may be laid down in general terms that the shortest and least picturesque of these designations will generally be found the most serviceable, both from the expenditure of time that it will save in signing certificates, and in the greatest ease by which it will be understood of the people. Happily, or unhappily, a qualification even of the highest order has, as a rule, but small relation to success in practice, and many practitioners of light and leading will be found to have laid the foundations of their success on a more solid basis than that of academical triumph.

## COURSE OF STUDY.

Although there are certain individual variations, the course of study pursued at all the medical schools is pretty much the same. One or two of the Universities are a little exacting in the number of special subjects they pile on to the crouching backs of their alumni, but in course of time it is generally found that the other centres of instruction follow their lead. Still, it is well to remember that from the moment the student pays his fee to the dean, the disposition of each moment of his time for the next five years is laid down with procrustean exactness, and that any diversion in the shape of amusement, illness, or failure in examination connotes a corresponding addition to the length of his pupilage.

## THE ULTIMATE FUTURE.

Once qualified, a medical man can therefore consult his predilections in some degree as to where he will practise his profession, though he will probably find the choice somewhat narrowed by the pecuniary resources at his disposal and the meagre opportunities offered for enterprise in the vicinity of popular, established practitioners. If he be averse from the struggle for existence in the troubled waters of private practice, he may turn to the comparative haven of competency afforded by the services. The Army, Navy, Indian, Colonial, and West African appointments may tempt him abroad, or the Poor-law infirmaries, lunatic asylums, public health officerships, or fever hospitals, may prevail on him to remain at home. In all the official Government services there is a career with graduated promotion and certain pension, whilst in the local services at home promotion is very uncertain, the pay, except in a few instances, very poor, and a pension either not provided or calculated on a studiously thrifty basis. One of the special advantages of medicine is that its votaries are nearly always sufficiently in request to be able to pick up a living as long as health lasts, and when old age comes on the practitioner will find that a parental Government is willing to pay him 5s. a week to the end of his days, provided he has not availed himself of Poor-law relief in the meantime.

## SUMMARY.

There are two types of men which find in medicine the most satisfying career. One is he who has a strong affinity for nature and natural phenomena. To such the profession of healing offers numberless opportunities for applying their peculiar powers, and gives much entertainment by the elusiveness of its secrets. The other class of man which finds satisfaction in the practice of medicine is he who regards the welfare of others before his own comfort and convenience. These rare beings, less rare probably in the medical profession than in any other, make devoted practitioners among the poor, and do not account their labour wasted if their patient gets well but cannot afford through stress of illness to pay the bill. The man who does not get on well at medicine is he who wishes to account for all his services on a cash basis, and to make his practice a purely business concern. As a matter of fact, it is not possible to translate personal services into an exact money equivalent, and much unpleasantness pursues the path of him who tries to do so. The best that many men hope for is that a reasonable number of honest and grateful people will be found so far to appreciate his services that he is relieved of financial strain for the next half-year.

Medicine, then, is the means to an end, and that end is the amelioration of man's lot on earth and not the aggregation of wealth. As the first it is a brilliant success; as the latter, it is a sorry business.

## THE ENGLISH UNIVERSITIES.

The English Universities are ten in number, *viz.*, Oxford, Cambridge, London, Manchester, Durham, Liverpool, Leeds, Sheffield, Birmingham and Bristol, beside the University of Wales. The choice of a University is usually determined by social, geographical, and financial considerations. Students whose parents are able and willing to incur the necessary expense will do well to select one of the ancient Universities, since their degrees confer upon their holders a status not accorded by the public to the degrees of more modern institutions. To those less favoured by fortune, but blessed with energy and a fair share of intelligence, the London University offers ample scope, and its degrees are recognised as the outward and visible sign of high professional attainments. A capable and industrious student, however, may equally well lay the foundations of success in one of the newer provincial Universities.

## OXFORD.

There are two degrees in medicine, B.M. and D.M., and two degrees in surgery, B.Ch. and M.Ch. The B.M. and B.Ch. degrees are granted to those members of the University who have passed the second (B.M.) examination. Graduates in Arts, B.A., are alone eligible for these degrees. In order to obtain the degrees of B.M. and B.Ch., the following examinations must be passed:—1. Preliminary. Subjects:—Mechanics and physics, chemistry, zoology and botany. 2. Professional. (a) First examination (held twice a year): Subjects:—Organic chemistry, unless the candidate has obtained a first or second class in chemistry in the Natural Science School; Human physiology, unless he has obtained a first or second class in animal physiology in the Natural Science School; Human anatomy. (b) Second examination: Subjects:—Medicine, surgery, midwifery, pathology, materia medica and pharmacology, forensic medicine with hygiene. The approximate dates of the examinations are as follow:—Preliminaries:—December, March and June; Professional (First and Second B.M.), June and December.

The degree of D.M. is granted to Bachelors of Medicine of the University who have entered their thirty-ninth term on presenting a dissertation approved by the appointed professors and examiners.

The degree of M.Ch. is granted to Bachelors of Surgery of the University who have entered their twenty-seventh term, who are members of the surgical staff of a recognised hospital, or have acted as dresser or house surgeon in such a hospital for six months, and who have passed an examination in surgery, surgical anatomy, and surgical operations. This examination is held annually, in June.

**Diploma in Public Health.**—The examination for the Diploma is held about the end of November in each year, and is open to any registered medical practitioner, whether he be a graduate of the University of Oxford or not. It is conducted according to the statutes and regulations of the University, and these have been framed so as to be consonant with the Resolutions and rules adopted by the General Medical Council for Diplomas in Public Health.

The examination consists of two parts. In the first of these candidates are required to exhibit a knowledge of chemistry and physics in the relations of these sciences to Public Health. In the second part of the Examination the candidate is examined in the subjects of general hygiene and of pathology in its bearings on Public Health. In all the subjects the Examination is partly practical. Candidates may offer themselves for the two parts of the examination on the same occasion or on different occasions; but their admission to the second part is contingent on their having already satisfied the examiners in the first part.

In July 1910 there will be an examination for the newly-established diploma in Ophthalmology.

There are many valuable prizes and scholarships, details of which may be obtained from the University Calendar.

Candidates who desire to prepare for the examina-

tion within the University will be afforded facilities for doing so in the laboratories of the scientific departments concerned with the subjects of examination; and arrangements can also be made for candidates to acquire a practical knowledge of the duties of Public Health administration under the supervision of the Medical Officer of Health for the City of Oxford. Information on these points may be obtained by application to the Regius Professor of Medicine, University Museum, Oxford.

## UNIVERSITY OF CAMBRIDGE.

At the University of Cambridge five years of medical study are required for the M.B. and B.C. degrees. The candidate must have resided nine terms (three years) in the University, and have passed the "previous" examination in classics and mathematics. There are three examinations: The first in (1) chemistry, physics, and (2) biology; the second in human anatomy and physiology; and the third in (1) pharmacology and general pathology, (2) in surgery, midwifery, and medicine. The first examination is divided into three parts, and the third examination into two parts, which can be taken separately. Subsequently to the third examination an Act has to be kept which consists in reading an original thesis, followed by an oral examination on the subject of the thesis. As the subjects for the examination for the degree in surgery are included in the third examination for the M.B. degree, candidates are admitted to the degree of Bachelor of Surgery on passing the third examination for Bachelor of Medicine.

The M.D. degree may be taken three years after the M.B. An Act has to be kept, including the presentation of an original thesis, with oral examinations and an essay to be written extempore. There is also the degree of Master of Surgery, for which the candidate, having already passed for B.C., or being M.A., has otherwise qualified in surgery, has to pursue extra study in surgery, and has a special examination or submits original contributions of merit to the science or art of surgery. The yearly expenditure of a student who keeps his term by a residence in a college is from £150 to £200 a year. This, however, may include all payments to the University and the College—all fees as well as clothes, pocket money, travelling expenses, &c. Non-collegiate students have only to pay the University fees, which are not large. They lodge and board as they like; their expenses, therefore, are entirely in their own hands.

The University grants a diploma in public health without the necessity of residence, the examination being in so much of State Medicine as is comprised in the functions of officers of health, and subject to the latest requirements of the General Medical Council. These examinations are held in Cambridge the first week in April and October. Candidates, whose names must be on the "Medical Register" of the United Kingdom, and need not be members of the University, should send in their applications to the Secretary of the State Medicine Syndicate a fortnight in advance. Every candidate who has passed both parts of the examination to the satisfaction of the examiners will receive a University Diploma testifying to his competent knowledge of the subjects comprised in the duties of a medical officer of health.

There is also a special examination in Tropical Medicine and Hygiene, held annually twice, in January and in August. It is open to qualified practitioners under certain conditions as to previous study and experience. Successful candidates receive a University Diploma.

At the October Examinations, Part I. will begin on October 7th, Part II. on October 12th.

An abstract of all Regulations may be obtained upon sending a stamped directed envelope to the Assistant Registry, Cambridge. Full information is contained in the University Calendar.

## UNIVERSITY OF LONDON.

The Medical Faculty grants the degrees of Bachelor of Medicine and Surgery, Doctor of Medicine and Master in Surgery. Under the new regulations the

students are divided into "Internal" and "External." Internal students are students who have matriculated at the University, and who are pursuing a course of study approved by the University, either (a) under the direct control of the University or a committee appointed thereby, or in one or more of the schools of the University; or (b) under one or more of the appointed or recognised teachers of the University. An external student is one who has adopted an alternative course of study. The regulations differ somewhat in their application to the two groups of students. We propose to deal with them only as they affect *internal* students, since the special information required by the others had best be obtained direct from the Registrar. Under no circumstances will a student be admitted to the final examination for a degree until at least five years have elapsed since matriculation or other examination entitling to registration as a medical student.\*

*The Matriculation Examination* takes place thrice yearly—in January, June (or July), and September. Application for admission to it must be made on a special form about six weeks beforehand, and the candidate must have completed his 16th year at the date of the examination. Candidates must show a competent knowledge of five subjects, among which must be English and elementary mathematics.

*The First Examination for Medical Degrees* takes place twice in each year, in December and July, and consists of papers on inorganic chemistry, biology, and physics, and there will be a practical examination in each subject. Examiners will also be at liberty to test candidates *viva voce*. A student may present himself for examination in each of the three subjects, separately or in all at the same time. Part I. of this examination includes papers in inorganic chemistry, physics, and biology, with practical examinations; second examination for medical degrees, Part I., is an examination in organic chemistry. Six months must elapse after passing the first examination for medical degrees.

*The Second Examination for Medical Degrees, Part II.*, takes place twice a year, March and July. Candidates must have passed the First Examination for Medical Degrees at least two years previously. The subjects of examination are Anatomy, Physiology and Histology, and Pharmacology, including *Materia Medica*. Candidates who have failed in one subject only at this examination may offer themselves for re-examination in that subject, if permitted to do so by the examiners. Three scholarships, one of the value of £40 in Anatomy, another of the same amount in Physiology, and one of £30 in Pharmacology, may be awarded by the examiners to any candidate who has passed the whole of the examination at one time.

*Provincial Examinations for Matriculation.*—These examinations are appointed by the Senate from time to time upon the application of any city, institution, or college desiring to be named as a local centre for one or more examinations in London under the supervision of sub-examiners also appointed by the Senate. Candidates wishing to be examined at any centre must give notice upon their forms of entry to the Principal of the University. Besides the University fee a fee usually varying from £1 to £3 is charged by the local authorities and must be paid at the local centre before the commencement of the examination.

*The Third Examination for Medical Degrees or M.B., B.S.*, takes place twice a year, in October and May. No candidate is admitted to this examination unless he has completed the course of study prescribed in the schedule or in less than two academic years from the

date of passing the Second Examination for Medical Degrees, Part II., in anatomy and physiology.

The subjects of the examination are Medicine (including Therapeutics and Mental Diseases), Pathology, Forensic Medicine and Hygiene, Surgery, and Midwifery and Diseases of Women. The subjects may be divided into two groups. Either of which may be taken first at the option of the candidate, or the groups may be taken together.

*Doctor of Medicine.*—The examination for this degree is held twice a year, in December and July. Candidates must have passed the examination for the M.B., B.S., and may present themselves for examination in one of the following branches: (1) Medicine, (2) Pathology, (3) Mental Diseases, (4) Midwifery and Diseases of Women, (5) State Medicine, (6) Tropical Medicine; and if they wish, may pass also in another branch at a subsequent examination. Candidates for Branches 1 to 4 who have taken honours at the M.B., B.S. examination in the subject in which they present themselves for the M.D. degree, or who, subsequently to taking the M.B., B.S., have conducted a piece of original work approved for the purpose by the University, or have had special experience approved by the University, may present themselves for the M.D. examination one year after taking their Bachelor's degree. Candidates in Branch 5 (State Medicine) must show that they have taken the degrees M.B., B.S., not less than two years previously, and that subsequently to taking those degrees they have had (1) six months' practical instruction in an approved laboratory; (2) six months' practical instruction from a medical officer of health, of which three must not coincide with the laboratory work, and three months' practice at a hospital for infectious diseases. Candidates in Branch 6 (State Medicine) must have either passed that subject with honour in the M.B.; or have done approved original work; or have approved special experience. The interval between passing the M.B., B.S. and proceeding to the M.D. State Medicine may be reduced to one year, subject to conditions corresponding to those affecting Branches 1, 2, 3, and 4.

*Master of Surgery.*—The examination for this degree takes place twice in each year, commencing on the same dates as the foregoing, and the general regulations with regard to the M.D. practically apply to it, surgery being substituted for medicine.

*Fees.*—For Matriculation, £2 for each entry. Preliminary Scientific Examination.—Part I: £5 for each entry to the whole examination, and £2 for each subject when less than the whole examination is taken at one time. Part II.: No fee for first entry, £2 for each subsequent one. Intermediate Examination.—£10 for each entry to the whole examination, and £5 for re-examination in one subject. M.B., B.S. Examination.—£10 for each entry to the whole examination, and £5 for examination or re-examination in either group. M.D. and M.S. Examinations.—£20 for each entry.

This University has established centres for preliminary and intermediate studies at University and King's Colleges, and students who purpose taking the London degree should make themselves acquainted with the details attached to external and internal students. Information on these points may be had of the Academic Registrar, University of London, South Kensington.

*N.B.*—The new regulations came in force on July 1st last. Students who commenced their course before that time are entitled to certain exemptions and should apply in any case to the Registrar for confirmation.

#### UNIVERSITY OF DURHAM.

Two diplomas and six degrees in Medicine and Hygiene are conferred, *viz.*, the degrees of Bachelor of Medicine, Bachelor of Surgery, Master of Surgery, Doctor in Medicine, Bachelor of Hygiene, and Doctor of Hygiene, and Diplomas in Public Health and Dental Surgery. These degrees are open to both men and women.

For the degree of Bachelor of Medicine (M.B.), there are four professional examinations. The subjects are:

\* May obtain registration as Internal or External students on presentation of documentary evidence as to their condition and a payment of £2; Graduates of such British, Colonial, and foreign Universities as are approved by the Senate for that purpose, and those who have passed all the examinations required for a degree in those Universities, also women who have obtained Tripos certificates granted by the University of Cambridge, and women who have obtained certificates showing that, under the conditions prescribed by the Delegacy for Local Examinations at Oxford, they have passed the Second Public Examination of that University or have obtained honours in the Oxford University Examination for Women in Modern Languages, and students who hold the Scotch School Leaving Certificate, having passed on one and the same occasion, in the Higher or Honours Grade in all the subjects required by the regulations for the Matriculation Examination.

Elementary anatomy, biology, chemistry, and physics. For the second: Anatomy, physiology, materia medica, therapeutics, and pharmacology. For the third: Pathology, medical jurisprudence, public health, and elementary bacteriology; and for the fourth: Medicine, clinical medicine and psychological medicine, surgery and clinical surgery, midwifery, and diseases of women and children.

It is required that one of the five years of professional education shall be spent in attendance at the University College of Medicine and the Royal Victoria Infirmary, Newcastle-upon-Tyne. First and second year students (dating from registration) are not required to comply with the regulation regarding attendance on hospital practice. Candidates who have passed the First and Second Examinations of the University will be exempt from the First and Second Examinations of the Conjoint Board.

For the degree of Bachelor of Surgery (B.S.) every candidate must have passed the examination for the degree of Bachelor of Medicine of the University of Durham, and must have attended one course of lectures on operative surgery, and one course on regional anatomy. Candidates will be required to perform operations on the dead body, and to give proof of practical knowledge of the use of surgical instruments and appliances.

For the degree of Master of Surgery (M.S.) candidates must not be less than twenty-four years of age, and must satisfy the University as to their knowledge of Greek or German. In case they shall not have passed in either of these subjects at the Matriculation Examination for the M.B. degree, they must present themselves at Durham for examination in it at one of the ordinary examinations held for this purpose before they can proceed to the higher degree of M.S. They must also have obtained the degree of Bachelor of Surgery of the University of Durham, and must have been engaged for at least two years subsequently to the date of acquirement of the degree of Bachelor of Surgery in attendance on the practice of a recognised hospital, or in the naval or military service, or in medical or surgical practice.

For the degree of Doctor of Medicine (M.D.) candidates must be of not less than twenty-four years of age, and must satisfy the University as to their knowledge of Greek or German. In case they shall not have passed in either of these subjects at the Matriculation Examination for the M.B. degree, they must present themselves at Durham for examination in it at one of the ordinary examinations held for this purpose before they proceed to the higher degree of M.D. They must also have obtained the degree of Bachelor of Medicine of the University of Durham, and must have been engaged for at least two years, subsequently to the date of acquirement of the degree of Bachelor of Medicine, in attendance on the practice of a recognised hospital or in the naval or military services, or in medical or surgical practice.

Each candidate must present an essay which has been prepared entirely by himself (and typewritten), based on original research or observation, on some medical subject selected by himself, and approved by the Professor of Medicine, and must pass an examination thereon, and must be prepared to answer questions on the other subjects of his curriculum, so far as they are related to the subjects of the essay.

Candidates for any of the above degrees must give at least twenty-eight days' notice to the Secretary of the College of Medicine, Newcastle-on-Tyne. In the case of the M.D. (Essay) Examination, candidates must send in their essays six weeks before the date of the examination.

A new wing has been added to the College of Medicine to accommodate the departments of physiology and bacteriology. It also contains students' union rooms and gymnasium.

The New Royal Victoria Infirmary, containing 400 beds, was opened by H.M. the King, in July, 1906. In the new infirmary adequate accommodation is provided for the study of the various special subjects, in addition to the ordinary clinical work.

Practical midwifery can be studied at the Newcastle Maternity Hospital. Opportunities for practical study are also afforded by the Dispensary, City Infectious Diseases Hospital, Eye Infirmary, and at the Northumberland County Lunatic Asylum.

There are various appointments open to students, whilst the scholarships available are numerous and of considerable value.

**Fees.**—(a) A composition ticket for lectures at the college may be obtained—1. By payment of 72 guineas on entrance. 2. By payment of 46 guineas at the commencement of the first sessional year and 36 guineas at the commencement of the second sessional year. 3. By three annual instalments of 36, 31, and 20 guineas, respectively, at the commencement of the sessional year. A Composition Ticket for the course of lectures and practical work of the first two years of the curriculum may be obtained by the payment of 40 guineas on entrance. (b) Single courses of lectures, five guineas. (c) Fees for attendance on hospital practice: For three months' medical and hospital practice, five guineas; for six months, eight guineas; one year, twelve guineas; composition fee in one payment, twenty-five guineas; or by three instalments at the commencement of the sessional year, viz., first year, 12 guineas; second year, ten guineas; third year, six guineas; or by two instalments, viz., first year, fourteen guineas; second year, twelve guineas. In addition, two guineas yearly up to three years must be paid to the Committee of the Royal Infirmary. (d) Composition fee for lectures, &c., at the College for the Diploma in Dental Surgery, 34 guineas. Composition fee for dental practical work at Newcastle Dental Hospital, 35 guineas.

A Diploma in Dental Surgery has been instituted. Before admission to the Final Examination, each candidate must furnish evidence, (1) of having attained the age of 21 years, (2) of having undergone a three-years' pupillage in mechanical dentistry with a registered dentist, and (3) of having been engaged in professional study for at least four years subsequent to registration as a dental student. He must also sign such declaration as the University may determine, binding himself not to advertise for professional purposes. Examinations are held concurrently with the medical examinations, and the fees payable by candidates amount to £15.

Further particulars will be given on application to Prof. Howden, Secretary, University of Durham College of Medicine, Newcastle-on-Tyne.

**N.B.**—The new regulations have recently come into force. Students who commenced their course under the old regulations are entitled to various exemptions. In all cases such students had better apply for confirmation to the Registrar.

#### MANCHESTER UNIVERSITY.

Candidates for degrees in medicine and surgery must attend classes in the University during at least two years.

The Degrees in the Faculty of Medicine are Bachelor of Medicine (M.B.), Bachelor of Surgery (Ch.B.), Doctor of Medicine (M.D.), and Master of Surgery (Ch.M.). All candidates for Degrees in medicine and surgery are required to pass the Matriculation Examination, or to have passed such other examination as may from time to time be recognised for this purpose by the University.

The subjects of the Matriculation Examination (Faculty of Medicine) are—1, English language or literature; 2, English history; 3, Mathematics; 4, Latin; 5, two of the following; one of which must be a language:—(a) Greek; (b) French; (c) German; (d) some other modern language, approved by the Joint Matriculation Board; (e) elementary mechanics; (f) chemistry; (g) geography (physical, political, and commercial); (h) Natural History (plants and animals). Notice of intention to present either Italian or Spanish must be given to the Secretary, Joint Matriculation Board, Manchester, before March 1st in each year.

Before admission to the Degrees of Bachelor of Medicine and Surgery candidates are required to send in the

usual certificates of age and study as at the other Universities. All candidates for these Degrees must pass four examinations, and must have attended courses of both lectures and laboratory work.

The final examination cannot be taken before the fifth year of medical study in accordance with the University regulations. The subjects of examination are as follows: 1, Medicine, systematic and clinical, including mental diseases and diseases of children; 2, Surgery, systematic, clinical, and practical; 3, Obstetrics and diseases of women; 4, Forensic medicine and toxicology.

The certificates required from candidates at the Third and Final examinations are practically the same as for the Final examination at the London University, and only those who have previously passed the Second Examination are admitted to it. The regulations relating to the M.D. and Ch.M. Degrees can be obtained on application to the Registrar.

*Fees.*—Matriculation examination, £2. First Examination, £5; for any subsequent examination, £2. The fees for the Second Examination, for the Third and Final Examinations, and for the examination for the degree of Ch.M., are the same as for the First Examination. A fee of £10 is payable on the conferring of the degree of M.D., a fee of £5 on the conferring of the degree of Ch.M.

The Matriculation Examination is held in July and in September. The first M.B. and Ch.B. is held in June; also about the end of September. The second examination is held in December, and in March, the third examination in March, July and December; the Final in July and March; the examination for Ch.M. in July only.

The medical school buildings, which include large laboratories, dissecting-rooms, library and reading-rooms, are on the most modern principles, and students wishing to engage in anatomical, physiological, or pathological research will find excellent opportunity for study in the complete and well-furnished laboratories. Hospital practice is taken out at the (a) Royal Infirmary, which contains 592 beds. The Cheadle Lunatic Asylum, St. Mary's Hospitals, the Southern Hospital, and other special hospitals also afford teaching facilities of great importance.

The appointments open to students are numerous and of considerable monetary value, and there are probably more here than are available at any other medical centre. The principal are:—Nine Entrance scholarships, the Leech fellowship of £100; Entrance scholarships in medicine, £100 (towards University and Infirmary fees); Manchester Grammar School scholarships, two or three of not less than £15 or more than £30 per annum for three years; Dreschfeld Memorial Scholarship £30, awarded annually; Turner scholarship of £20 to students who have completed a course of medical study in the University; Platt physiological scholarships, two of the value of £50 each; Platt zoological and botanical scholarship, £50; Professor Tom Jones' memorial surgical scholarship of £100, awarded triennially; two Dauntsey medical entrance scholarships, value £35; John Henry Agnew scholarship in diseases of children, value £30, awarded annually; Graduate scholarship in medicine, £25 to £50, awarded annually; and many others.

*Fees.*—For courses of instruction for the degrees of M.B., and Ch.B., of the University:—For the first M.B. examination the total cost amounts to about 28 guineas payable on entry. A composition fee of 70 guineas, payable in three instalments of 30, 20, and 20 guineas, at the commencement of the second, third, and fourth years of studentship respectively, admits to the courses of instruction required for the degrees of M.B. and Ch.B.

*Dental Fees.*—The composition fee for candidates for the University degree of Bachelor of Dental Surgery is 60 guineas, and for candidates for the University diploma in Dentistry is 55 guineas, payable in two equal instalments at the beginning of the first and third years of studentship.

## UNIVERSITY OF BIRMINGHAM.

The University of Birmingham grants Degrees of M.B., Ch.B., M.D., Ch.M., and also a B.Sc. in the subject of Public Health. As a rule, in order to obtain any of these Degrees it is necessary that a student shall have passed at least the first four years of his curriculum in attendance upon the classes of the University, but the Senate has power of recognising attendance at another University as part of the attendance qualifying for these degrees.

*Degrees of Bachelor of Medicine and Bachelor of Surgery.*—The student must have passed either the Matriculation Examination of the University or one of the following examinations, which will be accepted in lieu thereof for the present:—(a) The previous examination of the University of Cambridge; (b) Responsions of the University of Oxford; (c) The matriculation examination of any other University in the United Kingdom; (d) The leaving certificate (higher) of the Oxford and Cambridge Boards; (e) The Oxford or Cambridge senior local examination.

Matriculation Examinations are held in July and September each year.

*Degrees of Doctor of Medicine and Master of Surgery.*—At the end of one year from the date of having passed the Final M.B., Ch.B. Examination, the candidate will be eligible to present himself for the higher Degrees of either Doctor of Medicine or Master of Surgery or both, the regulations for which may be had upon application to the Dean. The University also grants a Degree and a Diploma in Public Health, and provides adequate instructions for the same.

*Dental Department.*—The University grants the Degrees of Bachelor and Master of Dental Surgery (B.D.S. and M.D.S.), and a Diploma in Dental Surgery (L.D.S.). The whole of the instruction for which may be taken out in the University, with which is associated the Birmingham Dental Hospital.

*THE GENERAL AND QUEEN'S HOSPITALS.*—The practices of these hospitals are amalgamated for the purpose of clinical instruction under the direction of the Birmingham Clinical Board, by whom all schedules will be signed and all examinations conducted. The hospitals have a total of upwards of 500 beds, 8,000 in-patients and 80,000 out-patients are treated annually, and many valuable posts are open to students at both.

Further information can be obtained from Professor Gilbert Barling, Dean of the Medical Faculty.

## THE UNIVERSITY OF LIVERPOOL.

The Degrees in the Faculty of Medicine are Bachelor of Medicine and Bachelor of Surgery (M.B. and Ch.B.), Doctor of Medicine (M.D.), and Master of Surgery (Ch.M.). The course of study for the Degrees of Bachelor of Medicine and Bachelor of Surgery is of five years' duration, and of this period two years must be spent at the University, the remaining three years can be taken in any medical school approved by the University.

For the Degree of M.D., a thesis is required which may be presented not earlier than one year after graduation, as M.B., Ch.B.

The degree of Ch.M. is given after a period of at least one year of further study after graduation as M.B., Ch.B., on the results of an examination.

*Diplomas.*—Diplomas have been instituted in Public Health (D.P.H.), Tropical Medicine (D.T.M.), and Veterinary Hygiene (D.V.H.). Special diplomas are also granted in Anatomy, Bacteriology, Bio-chemistry, and Parasitology after a course of study of three terms in the subject chosen and allied subjects.

Students may enter for the degrees of the University of Liverpool, or may study for the degrees, diplomas and qualifications of the other licensing bodies.

*Hospitals.*—The Clinical School of the University now consists of four general hospitals—the Royal Infirmary, the David Lewis Northern Hospital, the Royal Southern Hospital, and the Stanley Hospital; and of five special hospitals—the Eye and Ear Infirmary, the Hospital for Women, the Infirmary for Children, St. Paul's Eye and Ear Hospital, and St. George's Hospital for Skin Diseases. These hospitals



contain in all a total of 1,127 beds. The organisation of these hospitals to form one teaching institution provides the medical student and the medical practitioner with an unrivalled field for clinical education and study, and all are within easy access from the University. The period of hospital practice extends over the last three years of medical study. There are a large number of appointments to House Physicianships and Surgeonships both at the general and special hospitals, which are open to qualified students of the School. These appointments (20) in most cases carry salaries varying from £60 to £100 per annum.

**Fellowships and Scholarships.**—Fellowships, Scholarships, and Prizes of over £800 are awarded annually. A Holt Fellowship in Pathology and Surgery, of the value of £100 for one year, is awarded annually by the Medical Faculty to a senior student possessing a medical qualification. A Holt Fellowship in Physiology, awarded under similar conditions, also of the value of £100 for one year. A Robert Gee Fellowship in Anatomy, awarded under similar conditions, of the value of £100 for one year. An Alexander Fellowship for Research in Pathology of the annual value of £100, renewable. A Johnston Colonial Fellowship in Pathology and Bacteriology (£100 a year, renewable). A John W. Garrett International Fellowship in Physiology and Pathology (£100 a year, renewable). An Ethel Boyce Fellowship in Gynaecological Pathology (£100 a year, renewable). A Thelwall Thomas Fellowship (£100 a year, renewable) in Surgical Pathology. Two Lyon Jones scholarships, of the value of £21 each for two years, are awarded annually—a Junior Scholarship, open at the end of the first year of study to Liverpool University students in the subjects of the first M.B. Examinations, and a Senior Scholarship, open to all students in the school at the end of the second or third year of study, in the subjects of Anatomy, Physiology, and Therapeutics. A University Scholarship of £25 awarded on the results of the second examination for the degree. The Derby Exhibition of £15 for one year is awarded in Clinical Medicine and Surgery in alternate years. Students may compete in their fourth and fifth years. A Clinical School Exhibition of £15 awarded under similar conditions. The Torr Gold Medal in Anatomy, the George Holt Medal in Physiology, the Kanthack Medal in Pathology, and the Robert Gee Book Prize, of the value of £5, for Children's Diseases.

**Entrance Scholarships.**—Two Robert Gee Entrance Scholarships, of the annual value each of £25 for two years, are offered annually for competition. The holder is required to take out the First M.B. Course for the University Degree in Medicine.

The University also grants a Diploma in Dental Surgery (L.D.S.) and Degrees in Dental Surgery (B.D.S. and M.D.S.) The courses of systematic instruction are given in the University buildings, five minutes walk from the Dental Hospital.

Communications should be addressed to the Dean, Mr. K. W. Monsarrat, F.R.C.S., the University, Liverpool.

**LIVERPOOL SCHOOL OF TROPICAL MEDICINE, AND DIPLOMA OF TROPICAL MEDICINE, UNIVERSITY OF LIVERPOOL.**—The school is affiliated with the University of Liverpool and the Royal Southern Hospital of Liverpool. The instruction given occupies six hours a day for five days a week during the term, which at present is of ten weeks' duration. At the beginning of next year, however, there will be but two courses instead of three, and each extending to thirteen weeks. Each Course consists of (1) of a systematic series of lectures on tropical medicine and sanitation delivered by the Professor of Tropical Medicine at the University; (2) of additional lectures on special African diseases and special Indian diseases delivered at the University; (3) of systematic lectures and demonstrations on tropical pathology, parasitology and bacteriology by the Walter Myers lecturer, at the University; (4) of similar instruction on medical entomology by the Lecturer on economic Entomology at the University; and (5) of clinical

lectures and demonstrations delivered at the Royal Southern Hospital by the Physician in charge of the Tropical Ward, the Professor, and the Walter Myers Lecturer.

At the end of each term an examination is held by the University for its Diploma of Tropical Medicine (D.T.M.), which is open only to those who have been through the course of instruction of the school. The examination lasts three days, and consists (1) of three papers on tropical medicine, tropical pathology, and tropical sanitation and entomology respectively; (2) of a clinical examination; and (3) of an oral examination.

The fee for the full course of instruction is thirteen guineas, with an extra charge of ten shillings and sixpence for the use of a microscope, if required. The fee for the examination is five guineas. Applications should be made to the Dean of the Medical Faculty, University of Liverpool, from whom prospectuses may be obtained.

Two University Fellowships of £100 a year each are open to students of the school, amongst others. Accommodation for Research work is to be had, both at the University laboratory of the school, and at its Research Laboratories at Runcorn (sixteen miles distant from Liverpool).

Since it was instituted ten years ago the school has employed thirty different investigators paid out of its funds, and has despatched to the tropics twenty-one scientific expeditions, many of the workers having been taken from among its students. The work done by them has been published in twenty-one special memoirs with many plates and figures, besides text books and numerous articles in the scientific press. From the beginning of 1907, however, the Memoirs have been succeeded by the Annals of Tropical Medicine and Parasitology, published by the Committee, and open to outside contributors (apply to the Secretary, Bio. Exchange Buildings, Liverpool). The Mary Kingsley Medal is awarded by the School for distinguished work in connection with tropical medicine, and has been given to Colonel Bruce, Professor Koch, Dr. Laveran, Sir Patrick Manson, Lord Lister, Professor Looss, Professor Danielewsky, Dr. Charles Finlay, Mr. W. M. Haffkine, Professor Golzi, Colonel Gorgas, Professor Theobald Smith, and Rt. Hon. Joseph Chamberlain, M.P.

#### UNIVERSITY OF BRISTOL.

(The Winter Session commences Monday, Oct. 4th.)

The courses given at the University, and at the allied hospitals, provide full instruction for the degree and diploma examinations in medicine, dentistry, and state medicine. Well-equipped laboratories are now provided for anatomy, physiology, bacteriology, and pathology. Students of the college are admitted to the clinical practice of those very important and well-equipped institutions, the Bristol Royal Infirmary and the Bristol General Hospital. The infirmary and the hospital comprise between them a total of 470 beds, and both have very extensive out-patient departments, and special departments for the diseases of women and children, and of the eye, ear, and throat, besides large outdoor maternity departments and dental departments. Students of the college also have the privilege of attending the practice of the Bristol Royal Hospital for Sick Children and Women, containing 104 beds, and that of the Bristol Eye Hospital, with 40 beds. The total number of beds available for clinical instruction is therefore 614. Very exceptional facilities are thus offered to students for obtaining a wide and thorough acquaintance with all branches of medical and surgical work, and the whole curriculum is now open to women as well as men.

**Appointments.**—At the Royal Infirmary, and also at the General Hospital, clinical clerks and dressers reside in the house in weekly rotation. A pathological clerk is appointed every three months. Also obstetric clerks and ophthalmic dressers. Clinical lectures are given regularly at both institutions.

**Scholarships, Prizes, &c.**—Prizes and certificates of honour are given in University College in all the

subjects of the curriculum. There are one medical entrance scholarship, value £75, awarded annually, two Martyn memorial scholarships (pathology and morbid anatomy) of £10 each, the Tibbits memorial prize, value £9, for proficiency in practical surgery, Henry Marshal prize, £12; Clarke Scholarship, £15; Sanders Scholarship, £22 10s.; one gold and silver medal awarded by the committee, and various prizes for clinical work in surgery and medicine.

**Fees.**—School fees for attendance on all courses of lectures and hospital practice, and including all fees, except vaccination and small charge for board of midwifery student, 133 guineas. If in two instalments, 80 guineas at first session and 60 guineas in the beginning of the second year. Dental composition fee, 75 guineas, including all lectures, practical classes, and hospital practice. Dental mechanical laboratory fee, 75 guineas. Clinical fees (if the composition fee has not been paid)—Surgical practice, one year, 12 guineas; perpetual, 20 guineas. Medical practice, 20 guineas; perpetual, medicine and surgery, 40 guineas.

Prospectus and further information on application to the Dean, Professor Edward Fawcett, M.D.

#### UNIVERSITY OF LEEDS.

The school of medicine attached to this recently incorporated University, was originally founded nearly eighty years ago as the Leeds Medical School. The building, erected on a site contiguous to the infirmary, and opened fourteen years since, contains one of the finest dissecting-rooms in the United Kingdom, extensive laboratories for physiology and pathology with the most recent improvements in fittings and apparatus, ample lecture-room accommodation, a large library, and separate museums for pathology and anatomy. Professors and lecturers are attached, and the clinical teaching is given by the physicians and surgeons attached to the Leeds General Infirmary, one of the largest in the United Kingdom, having 524 beds, with a staff of physicians and surgeons of considerable eminence. Ophthalmic demonstrations and demonstrations of skin diseases are given in the infirmary by surgeons in each department, where also are obtainable various clinical clerkships, dresserships, and other appointments; and an extern maternity charity is attached, at which the necessary attendance at labours can be taken. Besides the infirmary there is a large dispensary, a large hospital for infectious diseases, a hospital for women and children, and a maternity home, all of which are open to students of the school.

**Scholarships, Prizes, &c.**—(1) An entrance scholarship of £73 2s. 6d. There is also a Hardwick prize in clinical medicine, a McGill prize in clinical surgery, each of the value of £10. Thorp prizes of £10 and £5 in forensic medicine and hygiene, and a Scattergood prize of £5 in midwifery, besides silver and gold medals and other class prizes. The composition fee for attendance upon all the required courses of school lectures is £73 2s. 6d. for University students who have attended the preliminary scientific courses, and the same for non-University students, exclusive of chemistry and biology.

At the General Infirmary, the composition fee for medical and surgical practice and clinical lectures is £42 in one sum, or two instalments of £22 each. These fees are not included in the composition fees for lectures and are payable separately.

A scholarship of £42 to cover the cost of medical and surgical practice is offered annually by the Infirmary.

Degrees and Diploma in Dental Surgery are obtainable at this University, being Bachelor of Dental Surgery (B.Ch.D.), and Master of Dental Surgery (M.Ch.D.). Candidates for the degree of Bachelor of Dental Surgery are required to have passed the Matriculation Examination, to have pursued thereafter approved courses of study for not less than five academic years, two of such years at least having been passed in the University subsequently to the date of passing Parts I. and II. of the first examination, and to have completed such period of pupilage or hospital

attendance, or both, as may be prescribed by the Regulations of the University. No candidate shall be admitted to the degree who has not attained the age of twenty-one years on the day of graduation.

Candidates for the diploma in Dental Surgery are required to present certificates showing that they have attained the age of twenty-one years, that they have attended courses of instruction, approved by the University, extending over not less than four years and that they have completed a pupilage of three years, two of such years at least, having been taken before the First Professional examination. Candidates are required to satisfy the Examiners in the several subjects of the following examinations: A preliminary examination in Arts; a Preliminary examination in Science; the First Professional examination; and the Final examination.

A Diploma in Public Health (D.P.H.) is granted after examination under the usual regulations.

#### UNIVERSITY OF SHEFFIELD.

By the Charter granted in 1905, this University is permitted to grant degrees in medicine. All its courses and all its degrees are open, without restriction, to both sexes. The new buildings of the University, opened by his Majesty King Edward in 1905, are situated at the west end of the city, overlooking on two sides the adjoining Weston Park. The medical department occupies the entire north wing of the University quadrangle, and is within easy reach of the various hospitals, with which it is connected for clinical purposes.

These are as follows:—The Royal Infirmary contains 255 beds, with an annual average number of over 3,800 in-patients, over 8,000 out-patients, and over 21,000 casualties; the Royal Hospital, with 172 beds, and an annual number of 2,500 in-patients, over 7,000 out-patients, and over 14,000 casualties; the Jessop Hospital for Diseases of Women, with 80 beds, nearly 500 in-patients, and over 2,000 out-patients; also a Maternity Department, with over 250 in-patients per annum, and over 700 out-patient cases attended. Special courses on fevers are held at the City Fever Hospitals (547 beds), and on Mental Diseases at the South Yorkshire Asylum (1,610 beds).

**Clinical Practice.**—The practices of the Royal Infirmary and Royal Hospital are amalgamated for the purpose of clinical instruction, giving a total of 427 beds for the treatment of medical, surgical and special cases.

**Appointments.**—The following are open to all students who have passed their examinations in anatomy and physiology:—Casualty Dresserships, Surgical Dresserships, Medical Clerkships, Pathological Clerkships, Ophthalmic Clerkships, Clerk to the Skin Department, etc.

**Fees.**—Composition fee of £80, payable in three instalments, viz.:—£24 at commencement of first year of study; £28 at commencement of second year of study; £28 at commencement of third year of study. This composition fee entitles the student to attendance on all the courses of lectures and practical classes, except pharmacy, vaccination, and instruction in anæsthetics required for a degree course in the University, or for the ordinary qualifications in medicine and surgery of the examining boards.

**Composition Fee for Medical and Surgical Hospital Practice.**—Fee for the full period of both medical and surgical hospital practice required by the examining boards:—If paid in one sum at commencement of hospital practice, £42; or if paid in two sums of 21 guineas and 20 guineas, one on beginning hospital practice, the other twelve months later, £43 1s.

**Dental Department.**—In connection with the University there is a complete dental department, which is fully recognised by the various examining bodies, and students are able to get their full curriculum here.

**Scholarships and Fellowships.**—Women's Medical Scholarship, value £100, open to women only; awarded in September, 1909. Entrance Medical Scholarship, value £116, open to both sexes, awarded in June each year. One Medical Scholarship, value 150 guineas, and one Medical Scholarship, value

50 guineas; open to both sexes. One Town Trustees' Scholarship, value £50, tenable for three years, for girls under the age of 19 years. Two Town Trustees' Scholarships, value £60 each, for boys or girls under 19 years of age. Town Trustees' Fellowship, value £75, open to graduates of the University, tenable for one year. Mechanics' Institute Scholarship, value £50, tenable for one year, and renewable for a second year. The Frederick Clifford Scholarship, value about £50 per annum, tenable for two years, open to graduates of the University; and the Kaye Scholarship, value about £22 10s. Gold Medal offered annually for the best student in clinical medicine and clinical surgery. Bronze medals are awarded annually to the students who have gained first place in the examinations for the full course in each year.

**Degrees.**—Candidates for a medical degree must have matriculated in the University or have passed such other examination as may be recognised for this purpose by the University and sanctioned by the Joint Matriculation Board. The subjects required by the General Medical Council must be included in the matriculation examination, or its recognised substitute. The degrees in medicine obtainable are Bachelor of Medicine and Bachelor of Surgery (M.B., Ch.B.), Doctor of Medicine (M.D.), and Master of Surgery (Ch.M.); conditions and particulars of which may be obtained on application to the Dean.

At the University of Sheffield post-graduate courses are held annually. The subjects vary from time to time, and include pathology, bacteriology, physiology, applied anatomy, surgery, operative surgery, ophthalmic surgery, diseases of ear and throat, dermatology, etc. A Diploma in Public Health is also granted by the University.

#### UNIVERSITY OF WALES.

The School of Medicine, in University College, Cardiff, which is one of the constituent colleges of the University of Wales, has since its foundation, in 1883, prepared students for the Preliminary Scientific Examination of the University of London, and for the corresponding examinations of other licensing bodies. In 1893 Chairs of Anatomy and Physiology and a Lectureship in *Materia Medica* and Pharmacy were established, making it possible for students of medicine to spend three out of the five years of prescribed study at Cardiff. Arrangements with the managing committee of the Cardiff Infirmary give students of the College the privilege of attending this large and well-ordered hospital, which is situated within five minutes' walk of University College. Many students, especially from Wales and Monmouthshire, avail themselves of the opportunities thus afforded to pursue the earlier part of the medical curriculum near home. All classes are open alike to both men and women students over sixteen years of age. The courses of instruction given at Cardiff are recognised as qualifying for the examinations of the Universities, Royal colleges, and other licensing bodies of Great Britain and Ireland. Having spent two or three years in study at Cardiff, and having passed the examinations in these years, a student may proceed to London or elsewhere and complete his qualifying course for a University degree or for a college diploma.

Students preparing for the first and second examinations of the Conjoint Board for England, or for the corresponding examinations of the Conjoint Board for Scotland, or for those of the Society of Apothecaries, may compound for their classes by paying a single composition fee of £41 10s., or by paying £20 and £24 10s. at the beginning of their first and second years respectively. Those preparing for the preliminary scientific and intermediate examination in medicine of the University of London may compound for their three years' instruction at Cardiff by paying a single composition fee of £57 10s., or by paying £13 13s., £28, and £21 at the beginning of their first, second and third years respectively.

In 1899 a department of Public Health was established, and lecturers in bacteriology and in public health and hygiene were appointed. Medical men preparing for the diploma in Public Health and Hygiene of the University of Wales can attend complete courses of

lectures and laboratory instruction in this department. These courses are also recognised by the University of Cambridge, by the Royal Colleges of Physicians and Surgeons, and by Victoria University.

In the case of medical students, attendance on the class of hygiene and public health is accepted by the Universities of London and Cambridge, and by the Conjoint Examining Board of England.

Courses of lectures to midwives, adapted to the requirements of the Central Midwives Board, under the Midwives Act, are commenced in October, January, and April. The lectures are suitable both for pupil midwives and practising midwives, as well as for nurses who desire to enter for the examination for certification under the Act.

**Scholarships, &c.**—The attention of students about to matriculate is drawn to the numerous entrance scholarships and exhibitions which are offered at the college for competition in September, most of which may be held by medical students. Full particulars of the examination for these may be obtained from the Registrar, or from the Dean of the Medical Faculty.

#### THE ENGLISH COLLEGES.

THE medical corporations in England are the Royal College of Physicians of London, the Royal College of Surgeons of England, and the Society of Apothecaries of London. The two Royal Colleges now co-operate to hold a series of examinations, on passing which the candidate receives the diploma of Licentiate of the Royal College of Physicians (L.R.C.P.), and Member of the Royal College of Surgeons (M.R.C.S.). The Society of Apothecaries grants a complete diploma (L.S.A.) in medicine, surgery, and midwifery.

#### CONJOINT EXAMINING BOARD IN ENGLAND.

Candidates for the above licences are required to complete five years of professional study at recognised medical schools and hospitals, after passing the preliminary examination, of which six months may be spent at an institution recognised by the Board, to comply with the following regulations and to pass the examinations hereinafter set forth.

**Professional Examinations.**—There are three examinations, each being partly written, partly oral, and partly practical. These examinations are held in the months of January, April, July, and October, unless otherwise appointed, fourteen clear days' notice before the day on which the examination commences being required, the candidate transmitting at the same time the required certificates. The subjects of the first professional examination are Part I., Chemistry; Part II., Physics; Part III., Elementary Biology; and Part IV., Practical Pharmacy. A candidate may present himself immediately after passing the preliminary examination in general education, provided he is able to produce the certificates required. He must present himself for examination in Parts I. and II. together, until he has reached the required standard to pass in both, or in one of these parts, but he will not be allowed to pass in one part unless he obtains at the same time at least half the number of marks required to pass in the other part. A candidate may take Parts III. and IV. separately, or he may present himself for the whole examination at one time. Practical Pharmacy may be taken with, or at any time before Part I. of the Final Examination. Any candidate who shall produce satisfactory evidence of having passed an examination for a degree in medicine in any of the subjects of this examination conducted at a University in the United Kingdom, India, or in a British Colony, will be exempt from examination in those subjects in which he has passed.

The fee for admission to the first examination is as follows:—For the whole examination, £10 10s.; for re-examination after rejection in Parts I. and II., £3 3s.; and for re-examination in each of the other parts, £2 2s.

The subjects of the second examination are anatomy and physiology. Candidates will be required to pass in both subjects at one and the same time. The study of anatomy and physiology will not be recognised

until the candidate has passed in two of the first three parts of the first examination. Candidates will be admissible to the second examination fifteen months from the date of passing the required subjects of the first examination.

A candidate referred at the second examination will be required, before being admitted to re-examination, to produce a certificate that he has pursued, to the satisfaction of his teachers, in a recognised place of study, his anatomical and physiological studies during a period of not less than three months subsequently to the date of his reference.

The fees for admission to the second examinations are: £10 10s. for the whole examination, and £6 6s. for re-examination after rejection.

The subjects of the third and final examinations are:—Part I. Medicine, including medical anatomy, pathology, practical pharmacy, therapeutics, forensic medicine and public health. Candidates who have passed in practical pharmacy at the first examination will not be re-examined in that subject at the third examination. Part II. Surgery, including pathology, surgical anatomy, and the use of surgical appliances. Part III. Midwifery and gynaecology. Candidates may take this examination in three parts separately, or they may present themselves for the whole examination at one time.

Fees for admission to the third or final examination are as follow:—For the whole examination, £21 0s. Part I.—For re-examination in medicine, including medical anatomy, pathology, therapeutics, forensic medicine, and public health, £5 5s.; for re-examination in practical pharmacy (if taken at this examination), £2 2s. Part II.—For re-examination in surgery, including pathology, surgical anatomy, and the use of surgical appliances, £5 5s. Part III.—For re-examination in midwifery and gynaecology, £3 3s.

A candidate referred on the third or final examination will not be admitted to re-examination until after the lapse of a period of not less than three months from the date of rejection, and will be required, before being admitted to re-examination, to produce a certificate, in regard to medicine and surgery, of having attended the medical and surgical practice, or the medical or surgical practice, as the case may be, during the period of his reference; and in regard to midwifery and diseases peculiar to women a certificate of having received, subsequently to the date of his reference, not less than three months' instruction in that subject by a recognised teacher. A candidate who possesses registrable qualifications is admissible to re-examination without producing additional certificates.

#### REGULATIONS FOR COLONIAL, INDIAN, AND FOREIGN CANDIDATES, AND UNIVERSITY CANDIDATES.

Persons holding a Colonial, Indian, or a foreign qualification entitling them to practise medicine in the country of origin, and conferred after a course of study and examinations equivalent to those required by the Royal Colleges, are admissible to the second and third (final) examinations forthwith.

Members of a University in the United Kingdom and Graduates of Medicine of certain recognised Colonial or Foreign Universities, are, under certain conditions, eligible for admission to the third (final) examination two years after passing at their University in the subjects included in the first and second examinations of the Board.

#### ROYAL COLLEGE OF PHYSICIANS OF LONDON.

**MEMBERS.**—The membership of the College is granted after examination to persons above the age of 25 years who do not engage in trade, do not dispense medicine, and do not practise in partnership. This diploma is only granted to persons already registered, or who have passed the final examination for the licence.

Medical graduates of a recognised University are admitted to a pass examination, but others must have passed the examinations required for the licence of the College. The examination, which is held in January, April, July, and October, is partly written and partly oral. It is directed to medicine, and is conducted by the president and censors. Candidates under 40, unless

they have obtained a degree in arts in a British University, are examined in Latin, and either Greek, French, or German. Candidates over 40 are not so examined, and the examination in medicine may in their case be modified under conditions to be ascertained by application to the Registrar. The fee for the membership is £42, but if the candidate is a licentiate £15 15s. is deducted. In either case £6 6s. has to be paid before examination.

#### ROYAL COLLEGE OF SURGEONS OF ENGLAND.

**MEMBERSHIP.**—The candidates are now subject to the regulations of the Conjoint Board.

**FELLOWSHIP.**—The Fellowship of the College of Surgeons is granted after examination to persons at least 25 years of age, who have been engaged in professional studies for six years. There are two examinations—the first in anatomy and physiology, which may be passed after the third winter session; the second chiefly directed to surgery, which may be passed after six years of professional study. The second examination may be passed before attaining the age of 25, but the diploma is not granted until that age is reached. Candidates for this part of the examination must have passed the final examination of the Conjoint Board in England, and have been admitted members of the College before they can be admitted thereto, except in the case of graduates in medicine and surgery of recognised Universities of not less than four years' standing.

**FEES.**—First examination, £5 5s.; second examination, £12 12s. The total fee payable on admission to the Fellowship is £31 10s., except for members, when the fee is £21. (The examination fees to the extent of £17 17s. count as part of the total fee.) Further information can be obtained on application to the Secretary of the Examining Board in England, Examination Hall, Victoria Embankment, London, W.C.

#### SOCIETY OF APOTHECARIES OF LONDON.

**PRIMARY EXAMINATION.**—This examination consists of two parts: Part I.—Elementary biology, Chemistry, Chemical physics, including the elementary mechanics of solids and fluids; Heat, Light, and Electricity. Practical chemistry, Materia medica, and Pharmacy. A synopsis indicating the range of the subjects may be obtained on application. Part II.—Anatomy and Physiology and Histology. The examination is held in January, April, July, and October.

The final examination is held monthly, except the month of September, and is divided into Sections 1 and 2.

Section 1 consists of three parts:

Part I. includes: Principles and Practice of Surgery, Surgical Pathology, and Surgical Anatomy, Operative Manipulations, Instruments and Appliances.

Part II. includes: (a) The Principles and Practice of Medicine, including Therapeutics, Pharmacology, Pathology, and Morbid Histology. (b) Forensic Medicine, Hygiene, Theory and Practice of Vaccination; and Mental Diseases.

Candidates passing either (a) or (b) will not be re-examined therein.

Part III. includes: Midwifery, Gynaecology, and Diseases of New-born Children, Obstetric Instruments and Appliances. Candidates may enter for Parts I., II., and III. together or separately.

Section 1 of the Final Examination, or any part thereof, cannot be passed before the expiration of 45 months from the date of registration as a medical student.

Section 2.—This section consists of two parts:

Part I.—Clinical Surgery.

Part II.—Clinical Medicine and Medical Anatomy. Section 2 cannot be passed before the expiration of the fifth year.

**FEES.**—Primary examination, £5 5s.; final examination, £15 15s.; total fee, £21.

Further information, with particulars as to the course of study and of the certificates required, can be obtained from the Secretary to the Court of Examiners, Apothecaries' Hall, E.C.

This licence is a registrable diploma in Medicine, Surgery, and Midwifery, and qualifies the holder to

compete for medical appointments in the Army, Navy, and Indian Services, also for Poor-law, Civil, and Colonial appointments.

The Gillson scholarship in Pathology of the annual value of £90, tenable for one year, is open to Licentiate of the Society and to candidates for the diploma who obtain it within six months of election to the scholarship. An examination in the art of prescribing is held annually, in January, at which the following prizes are awarded:—A gold medal of the value of £6; a silver medal, and a prize of books to the two best candidates.

### LONDON SCHOOLS.

The Schools of Medicine in the Metropolis are the following, the scholarships, prizes, students' appointments, fees, &c., being set forth in connection with each place named. The names of the hospital staff, lecturers, residential terms, and detailed information will be found, as a rule, in our advertisement columns.

**ST. BARTHOLOMEW'S HOSPITAL.**—This hospital has 750 beds, and for many years past the school attached has had a larger number of students than any other medical school in London. Laboratories have been specially equipped for the study of pathology, bacteriology, chemistry, biology, physics, and chemical pathology, and two additional operation theatres have just been built. A new block of buildings has just been completed at a cost of £120,000, and contains new casualty and out-patients' departments, eight special departments, quarters for the junior staff, a dining hall and a common-room for students, &c. A second new block, devoted to pathology, and containing extensive laboratories for Bacteriology, Clinical Pathology, Pathological Histology, Chemical Pathology, etc., was opened in May, 1909. Collegiate residence is permissible, subject to the ordinary rules.

**Appointments.**—Ten house physicians and ten house surgeons are appointed annually. During the first six months of office they act as "junior" house physicians and house surgeons, and receive a salary of £25 a year. During their second six months they become "senior" house physicians and house surgeons, and are provided with rooms by the hospital authorities, and receive a salary of £80 a year. A resident midwifery assistant, an ophthalmic house surgeon, and a house surgeon for diseases of the throat and nose are appointed every six months, and are provided with rooms and receive a salary of £80 a year. Two assistant anaesthetists are appointed annually, and receive salaries of £120 and £100 a year respectively. An extern midwifery assistant is appointed every three months, and receives a salary of £80 a year. Chief assistants and clinical assistants are appointed in each of the special departments. In-patient dressers, in-patient clinical clerks, clerks, and dressers to the assistant physicians, and assistant surgeons, and to the physicians and surgeons in charge of special departments, are appointed every three months without fee.

**Scholarships, &c.**—There are three open scholarships in science, £75, £75, £150, tenable for one year, and an Entrance Scholarship in Arts, value £100, and the Jeaffreson exhibition, value £50; at the end of first year four junior scholarships of £30, £20, £25, £15, respectively; Treasurer's prize for practical anatomy; Foster prize in practical anatomy; senior scholarship, value £50, for anatomy, physiology, and chemistry; Wix prize, Hichens prize, Lawrence scholarship and gold medal, value 40 guineas, for medicine, surgery, and midwifery; two Brackenbury scholarships, of £30, in medicine and surgery; Bentley prize, for reports of cases; the Kirkes gold medal for clinical medicine, with scholarship of £30. Shuter scholarship of £50; Skynner prize of £15; Sir G. Burrows' prize of £10; Matthews Duncan prize, medal and about £20; Willett medal and Walsham prize; Holden Research Scholarship in Surgery, value £105.

**Composition Fees.**—(1) For students commencing their medical studies, one sum on entrance, 165 guineas; or by four instalments of 45 guineas. (2) For students who have passed an examination in preliminary

science, in one sum on entrance, 145 guineas; or by instalments. (3) For students who have finished two years of medical study but have not passed an examination completing their anatomical and physiological studies; if paid in one sum on entrance, 110 guineas; or by annual instalments. (4) For students who have completed three years of medical study but have not passed an examination in anatomy and physiology, 90 guineas; or by annual instalments. (5) University students who have passed an examination completing their anatomical and physiological studies, in one sum, 80 guineas; or by instalments.

**Fees for preliminary scientific students:**—20 guineas; for laboratory instruction for D.P.H., 15 guineas. Fuller details will be supplied on application to the Dean.

**CHARING CROSS HOSPITAL.**—The school attached to this hospital is situated in Central London, and contains new physiological, pathological, and bacteriological laboratories, materia medica and anatomical museums, an anatomical theatre, enlarged dissecting-rooms, and chemical theatre. Clinical instruction is given in medicine, surgery, and obstetrics, and in the special departments, diseases of the skin, diseases of children, mental disorders, the throat, the eye, nose and ear, and in the orthopaedic, Röntgen and electrical departments.

The school is complete in all departments, with special teachers for all preliminary and intermediate subjects.

**Entrance Scholarships** are awarded annually to the value of £430.

**Appointments.**—The curator and pathologist are appointed annually at £100 a year each. Medical and surgical and obstetric registrars (annual) £40 a year each with luncheon in the hospital. Six house physicians, six house surgeons, and two resident obstetric officers are appointed each year, after competitive examinations. They are provided with board and residence in the hospital.

**Fees.**—The fees for the five years' curriculum may be paid either by composition fee, in one sum, on joining, 115 guineas, or by sessional payment system—Entrance fee, 10 guineas. In addition a sum of 15 guineas must be paid at the beginning of every winter session, and one of 10 guineas at the beginning of every summer session so long as the student remains in the school. Payment may also be made for individual classes and hospital practice when taken separately. Students of any university in the United Kingdom who have passed the examinations in anatomy, physiology, chemistry, and other preliminary subjects, may here complete their studies (except vaccination and attendance at a fever hospital) on payment of a fee of 74 guineas in one sum, or of 80 guineas in two sums, viz., one of 43 guineas on entry, and one of 37 guineas a year later.

The fees for dental students for the two years' curriculum may be paid:—(a) in one sum of 55 guineas on entry; (b) in two instalments—one of 31 guineas on entry; and the second of 30 guineas at the end of the first twelve months.

Prospectus and further information can be obtained on application to the Dean.

**ST. GEORGE'S HOSPITAL.**—This hospital is situated in the West End, facing Hyde Park, and is readily accessible from all parts of London or the suburbs. It has recently undergone extensive alterations and improvements, it has a service 436 beds, of which 100 are at the Atkinson-Morley Convalescent Hospital at Wimbledon, and contains special wards for ophthalmic cases and diseases of women.

**Appointments.**—Eight house physicians and eight house surgeons, entitled to reside and board in the hospital free of expense; twelve general assistants, six assistants in the special departments. Candidates for the above offices are selected quarterly by competition from among the perpetual pupils, sixteen pupils being in office at any one time. Obstetric assistant with a yearly salary at the rate of £50 and board and residence in the hospital; curator of the museum with a salary of £200; assistant curator with a salary of

£100; a medical registrar, with a salary of £200 per annum; a surgical registrar with a salary of £200 per annum; a resident anaesthetist with a salary of £100 per annum; an administrator of anaesthetics with a salary of £50 and two with salaries of £30 per annum. All offices are open to candidates without additional fee.

By arrangement with the University of London, all students for the first, second, and third years of the curriculum carry out the necessary courses of instruction at either King's College or University College. The entire teaching of the school is devoted to clinical subjects.

There are two entrance scholarships in arts and two in science, each of 50 guineas, and two scholarships open to University students, of 70 guineas and £50, particulars of which will be furnished by the Dean.

**Fees.**—For first year, £21 or £26 5s., according to the course. For second and third years, £57 15s. in one sum, or £63 in two instalments. Students entering their names on the books before commencing this preliminary or intermediate subjects pay no entrance fee. Fees for clinical students: Entrance fee, 10 guineas; annual composition fee, 30 guineas.

**GUY'S HOSPITAL.**—This hospital is situated on the Surrey side of London Bridge, and contains 608 beds in constant occupation. There are special wards for ophthalmic and obstetric cases, eight beds in the latter being appropriated for difficult cases of labour. Some beds have also been set apart for diseases of the ear and throat, and an "isolation" ward for cases of infectious diseases arising in the hospital has been constructed. An obstetric registrar and tutor and two clinical assistants and registrars in the ophthalmic department are appointed to augment the teaching in the special departments, in addition to those attached to the general surgical and medical wards. Attached to the hospital is a large residential college with rooms for about sixty men, whilst for students who prefer to live in the suburbs, no other hospital is so conveniently placed, the railway accommodation being good and close at hand. There is a complete School of Dental Surgery at this Institution, which is recognised by the Royal College of Surgeons of England; the facilities thus afforded of completing the whole course of dental study including the pupillage in mechanical dentistry within the walls of one hospital will be appreciated by those intending to practise dentistry. A new museum for pathological specimens and additional lecture and class rooms were opened in 1906.

**Appointments.**—Eight house surgeons, eight house physicians, sixteen out-patient officers, sixteen assistant house surgeons, eight obstetric residents, two ophthalmic house surgeons, twenty-four clinical assistants, and ninety-six dressers are selected annually from the students according to merit, and without payment. There are also a large number of junior appointments, every part of the hospital practice being systematically employed for instruction.

**Scholarships.**—Open scholarships of £100 and £50 in classics, mathematics, and modern languages. Open scholarships of £150 and £60 in chemistry, physics, and biology, and an open scholarship of £50 for University students in two of the following subjects:—Anatomy, physiology, organic chemistry, zoology, physics. The following are the scholarships, prizes, and medals open to students of the hospital:—Junior prizes for general proficiency, £20, £15, £10; Hilton prize for dissection, £5; Michael Harris prize for anatomy, £10; Sands Cox scholarship for physiology, £15; Wooldridge prize for physiology, £10; Beaney prize in pathology, £34; Golding-Bird prize in bacteriology, gold medal and £20; Treasurer's gold medal in clinical medicine; Treasurer's gold medal in clinical surgery; Beaney studentship in materia medica (tenable for 3 years), annually £31 10s.; Gull studentship in pathology (tenable for 3 or 5 years), annually £150. The Arthur Durham travelling scholarship of the value of £100, triennially; Greville Research Scholarship

£200 annually; Oldham Prize in Ophthalmology, £30 annually.

**Fees.**—A new system for payment of composition fees has been instituted at this school. Particulars may be obtained on application to the Dean, Guy's Hospital, London Bridge, S.E.

**KING'S COLLEGE HOSPITAL.**—The hospital is situated close to the Royal College of Surgeons, Lincoln's Inn. There are 220 beds. The student, who pays a composition fee for the whole medical curriculum, carries out his preliminary and intermediate medical studies at King's College, Strand, and enters the hospital when he has passed his examination in anatomy and physiology. The hospital contains special beds for diseases of women, children, eye, ear and throat cases. There are also dental, skin, X-ray, and photographic departments. There are well-equipped pathological laboratories, and the collection of pathological specimens has recently been moved from King's College to the hospital. The various athletic clubs, students' societies, and the Common Room are now under the management of the Clubs and Societies' Union.

**Scholarships.**—One of £50 for University students; four of £50, two in arts and two in science; a senior scholarship for fifth year students, and many special and class prizes are open for competition amongst students.

**Appointments.**—Senior medical, surgical and obstetric tutorships, Sambrooke medical and surgical registrarships, tenable for two years, each £50 per annum. Resident hospital appointments, *vis.*, senior and junior house physicians, physician accoucheur's assistant and assistant house accoucheur, and three house surgeons with free board and residence at the hospital; and senior and junior clinical assistants in special departments every six months.

**F.R.C.S. Examinations.**—Special classes are arranged for the final F.R.C.S. examinations. Further particulars can be obtained post free from the Dean.

**THE LONDON HOSPITAL.**—This hospital is the largest in Great Britain, containing, as it does, 922 beds. It has, moreover, wards and a teaching staff for almost every special department in the domain of medicine; the scholarships and prizes are many and valuable.

**Appointments.**—The salaried appointments open to students are those of medical registrars three, surgical registrars three, obstetric registrars one, medical, surgical, and obstetric tutors; senior dressers to out-patients; clinical assistants in the medical, surgical, ophthalmic, aural, light and skin, orthopaedic, and electrical departments. There are also five resident house-physicians and seven resident house-surgeons, two accoucheurs, seven receiving-room officers, two emergency officers, and three pathological assistants. Also unpaid clinical assistantships in the various special departments. In addition there are numerous assistantships and clerkships, and dresserships in the various departments.

**Scholarships and Prizes.**—At Entrance: Price scholarships in science, £120; in anatomy and physiology, £60; entrance scholarships in science, £60 and £35; Epsom scholarship, £126; Buxton scholarships in arts, £30 and £20. After Entrance: Anatomy and biology scholarships, £20; anatomy and physiology scholarship, £25; Letheby prizes, £30; scholarships in clinical medicine, surgery and obstetrics, £20 each; Duckworth Nelson prize, £10; Hutchinson prize, £40; Sutton prize, £20; Sir Andrew Clark prize, £26; Anderson prizes, £9; out-patient dressers' prizes, £60; practical anatomy prizes, £10; Douro-Hoare prize, £5; Wynne Baxter prize, £5 5s.

A special course for the D.P.H. will commence at the beginning of the winter session.

Special classes for the 1st, and 2nd, M.B.Lond., the primary and final Fellowship, and other examinations are held. Those for the final and primary F.R.C.S. commence on September 1st.

**Fees.**—The composition is 120 guineas. A reduction of 15 guineas is made to sons of medical men.

Special entries can be made either for single courses of lectures or for hospital practice. Residential accommodation is obtainable at a very reasonable



rate close by, or in the suburbs a few minutes' distant by train. Fuller particulars can be obtained of the Warden, Mr. Munro Scott.

**New Buildings.**—The new departments of bacteriology, public health, chemistry, and biology, the new pathological Institute at the hospital, and the new out-patients and special departments are now completed and in full use. New students' rooms have been added, and a garden and fives court opened for the use of the members of the London hospital clubs union. The new Laboratories for Physiology, Chemistry and Physics will be ready for use on Sept. 1st.

**ST. MARY'S HOSPITAL.**—This hospital is situated at Paddington, near the terminus of the Great Western Railway, and at present contains 301 beds, of which 31, recently opened in the Clarence Wing, are devoted to treatment by Therapeutic Inoculation. An additional Operating Theatre has recently been opened in this wing. The Inoculation Department, instituted in 1906, has greatly expanded, and occupies a series of rooms in the New Wing of the hospital.

The Department is under the personal supervision of Sir Almroth Wright, F.R.S.

The Athletic Ground (eight acres) is situated at North Kensington, and is easy of access from the Hospital.

**Appointments.**—All clinical appointments in the hospital are free to students of the Medical School, and the resident medical officers are chosen by competitive examination. Six house physicians, six house surgeons, four obstetric officers, and two resident anaesthetists are appointed in each year, and receive board and residence in the Hospital.

**Scholarships, &c.**—One scholarship in natural science, of the value of £145, open to any gentleman who has not completed a winter session of study at a medical school. Two scholarships each of the value of £50, and one of the value of £25, under the same conditions. Two scholarships, each of 50 guineas, open to students from any British University. The scholarships will be awarded by examination on September 20th, 21st, and 22nd.

**Fees.**—Fee for attendance on the full five years' curriculum of hospital practice and all lectures, demonstrations, and special tutorial classes, £140, paid in one sum on entering the school; or in instalments, £145.

Students who have completed their examinations in anatomy and physiology at the Universities of Oxford, Cambridge, or other University, are admitted as perpetual pupils on payment of a fee of 65 guineas in one sum, or 70 guineas in two annual instalments. University students, prior to completing the anatomy and physiology examinations, pay an annual fee of 25 guineas. After completing the anatomy and physiology examinations, the inclusive fee may be paid.

**Preliminary Scientific Course.**—A complete course of instruction in chemistry, physics, and biology, recognised by the University of London as an approved course for internal students, is held throughout the year. Students may join in October, January, or April.

**MIDDLESEX HOSPITAL.**—This hospital, which is conveniently situated in the centre both of business and residential London, contains 340 beds. There are special departments for cancer, and for ophthalmic, throat, aural, skin, dental, children's diseases, and electrical treatment (X-ray and Finsen light). Wards are also devoted to cases of uterine disease. Residence for students is obtainable in the residential college, which has its frontage on the hospital garden.

A Bacteriological and Public Health Laboratory has been added for the purpose of providing instruction for women medical practitioners preparing for the examinations for the Diploma in Public Health and for the M.D. in State Medicine of the University of London, and of affording facilities to them and other women students desirous of carrying out Research Work in Public Health, Bacteriology, and General Pathology.

**Appointments.**—Casualty surgical officer, casualty medical officer, six house surgeons, six house physicians, and two resident obstetric physicians. The above

officers have residence and board in the college free of expense. Clinical clerks and dressers in all the departments are also appointed in addition to the foregoing.

**Scholarships, &c.**—Three entrance scholarships of the value of £100, £50 and £25, respectively. One entrance scholarship of the value of £50, open to Oxford and Cambridge students only. (Subjects—Anatomy and physiology, including histology.) "Emden" Cancer Research Scholarship, £100. "Richard Hollins," Research Scholarship, £105. Two Broderip scholarships of £60 and £40 respectively, for medicine and surgery; John Murray medal and scholarship, awarded every third year; Hetley clinical prize, value £25, awarded annually for proficiency in practical clinical medicine, surgery, and obstetrics; the Lyell Gold Medal and scholarship, value £55, in surgery and surgical anatomy; the Leopold Hudson prize, value 11 guineas, in surgical pathology, including bacteriology; Freeman scholarship, £30, in obstetrics and gynaecology; an exhibition of 10 guineas for anatomy and physiology to second year's students as well as class prizes in all subjects.

**Fees.**—General fee for the entire course of hospital practice and lectures, 135 guineas, if paid in one sum on entrance, or by instalments of 60, 50, and 35 guineas, payable at the commencement of the first, second, and third years respectively. For those who have completed their anatomical and physiological studies the fee is 70 guineas on entrance, or in two instalments of 40 and 35 guineas. The composition fee for London University students is 145 guineas. For those who have passed the preliminary science examination 120 guineas. The fee for the curriculum for dental students is 54 guineas on entrance, or two instalments of 40 guineas and 20 guineas.

**ST. THOMAS'S HOSPITAL.**—This hospital, with medical school attached, is situated on the southern Embankment of the Thames, facing the Houses of Parliament and contains 602 beds, in constant use. The school buildings, which are separated from the hospital by a quadrangle, comprise numerous theatres, laboratories, and class rooms, which are well adapted for the modern teaching of large bodies of students in all subjects of the medical curriculum. There is a large library and reading-room, and a very complete museum and gymnasium.

**Appointments** are open to all students. A resident assistant physician and a resident assistant surgeon are appointed annually at a salary of £100 with board and lodging. Four hospital registrars, two at an annual salary of £100 each, and two at £50 each, are appointed yearly. The tenure of these offices may be renewed for a term not exceeding two years. Four resident house physicians, two resident obstetric house physicians, and one ophthalmic house surgeon are appointed each six months, also out-patient officers, and clinical assistants in the special departments.

**Scholarships, Prizes, &c.**—Five entrance scholarships are offered for competition in July, viz., one of £150 and one of £60 in chemistry, physics, and biology at the commencement of the second year; one of £50 open to University students who have passed in anatomy and physiology, for a medical degree in any of the Universities of the United Kingdom, and have not entered as students in any London Medical school, and two scholarships in arts giving free tuition for the first year of curriculum. Numerous scholarships, prizes, and medals are open to competition throughout the whole career of a student, including a Fellowship of £100 given by the Salters' Company for research in pharmacology, and the Louis Jenner research scholarship, £60, for pathological research.

Special courses of instruction for the First Professional Examination and Intermed., M.B.Lond., for the Oxford and Cambridge examinations, and for the Primary and Final F.R.C.S. are held throughout the year.

A register of approved lodgings is kept by the medical secretary, who has a list of local medical practitioners and others who receive students into their houses. The prospectus of the school may be obtained

on application to Mr. G. Q. Roberts, Secretary of the Medical School.

**Fees.**—A system for payment of composition fees is in operation. Full details may be obtained of the Secretary.

**UNIVERSITY COLLEGE HOSPITAL AND MEDICAL SCHOOL.**—The hospital with college opposite are situated in Gower Street, not far from Euston railway terminus, and the Medical school in University Street, connected with the hospital by a subway.

**Entrance.**—A student may enter the school as soon as he has passed the University of London Matriculation Examination, or one of the other preliminary examinations that qualify a medical student for entering a medical school. In this case he will pursue his preliminary and intermediate studies at University College, and when those are completed will carry on his final medical studies at University College Hospital Medical School. The student who, in addition to having passed a matriculation or other examination has completed his preliminary and intermediate medical studies at University College or elsewhere, may enter the University College Hospital Medical School for his final medical studies only. Qualified medical men and others who can produce evidence of sufficient qualifications may be admitted to special departments for the purposes of research, or to hospital practice for certain definite periods.

University College Hospital has, through the munificence of the late Sir John Blundell Maple, Bart., been rebuilt and extended in accordance with the requirements of modern medical science. The new hospital accommodates 300 patients, and possesses extensive out-patient and special departments.

Thirty-eight clinical appointments, eighteen of which are resident, are filled up by competition during the year, and these, as well as all clerkships and dresserships, are open to students at the hospital without extra fee.

The new medical school is now completed, and it provides accommodation for lectures and demonstrations and practical work in all the final subjects of the medical curriculum. There are three lecture demonstration theatres for the teaching of morbid anatomy, bacteriology, and chemical pathology; also rooms equipped for the teaching of operative surgery and surgical anatomy, and two large lecture theatres.

The library contains about 10,000 volumes.

The Medical Society, which was founded in 1828 for promoting the study of medical and surgical sciences amongst students, and for social intercourse, has four rooms set apart for reading and recreation, and there is a large gymnasium with baths attached in the school buildings, fully equipped and at the disposal of members of the Society.

**Scholarships, &c.**—Entrance scholarship of the value of 135 guineas, and two exhibitions of 55 guineas each, and the Epsom free medical scholarship for proficiency in science, the subjects being those of the Preliminary Scientific Examination of the University of London, and two of 80 guineas each, the subjects being anatomy and physiology; the Atkinson-Morley surgical scholarship of £45 a year, tenable for three years; the Atchison scholarship, value £55, tenable for two years; Sharpey physiological scholarship, value about £105 a year; Filliter exhibition for proficiency in pathological anatomy, value £30; Erichsen prize, operating case, value £10 10s., awarded for practical surgery; Dr. Fellowes' clinical medals, the Liston gold medal, Alexander Bruce gold medal, Cluff memorial prize, Tuke medals for pathology, and other prizes, as well as certificates of honour, are awarded after competitive examinations in particular branches of study.

**Composition Fees.**—The Preliminary Scientific Course at University College, 26 guineas; Intermediate Course at University College, 57 guineas; final M.B. Course at University College Hospital Medical School, 80 guineas if paid in one sum, or 82 guineas paid in two instalments of 50 and 32 guineas.

**C.—For Dental Students.** Composition fee for the Courses required for the L.D.S., 65 guineas; or exclusive of chemistry, practical chemistry, physics, and materia medica, 50 guineas.

Students may repeat attendance at the Courses in chemistry and physics for £3 3s. (inclusive) and in elementary biology for £2 2s.

It should be noted that under the arrangement with the University of London, that body controls the medical science section of the medical school now, while the advanced medical subjects, that is the subjects after the intermediate course, are controlled by the University College Hospital Medical School.

**WESTMINSTER HOSPITAL.**—This hospital is conveniently situated, facing the Abbey, and is readily accessible from all parts of the Metropolis. It contains 205 beds for general cases, and all the special departments. New school buildings have been erected close by which afford accommodation for 150 students. The class rooms, dissecting rooms, and lecture theatre are excellent samples of modern erections, affording ample scope for study.

**Appointments.**—Medical and surgical registrars, each £50 per annum; two house physicians, three house surgeons, one assistant house physician, one assistant house surgeon, and a resident obstetric assistant. These officers, except the two first named, are all boarded free of expense. Qualified students are appointed to be clinical assistants in the various departments.

**Scholarships, &c.**—(a) Winter Session.—The Guthrie scholarship £60, entrance scholarship £40, entrance scholarship £30, dental scholarship £20; subjects, Latin, mathematics, English, and either Greek, French, or German. University scholarships, 70 guineas, and £60; subjects, anatomy and physiology. Natural science scholarship, £60, subjects, same as for Prel. Sci. of University of London. Natural science scholarship, £40, subjects, chemistry and physics. Free presentation, open to pupils of Epsom Medical College. (b) Summer Session.—Natural science scholarship, £60, same as winter. Natural science scholarship, £40, same as above. Arts scholarship, £60, arts scholarship, £40. University scholarship, £60, subjects same as in winter session. (c) Prizes, to be competed for by unqualified men. Chadwick prize in Medicine and Surgery, 20 guineas, for students of any year not exceeding fifth. Bird medal and prize, in Obstetric Medicine, £14, for students who have completed fourth winter session. Sturges prize in clinical medicine, about £6, clinical surgery prize, £5. Abraham's prize in Clinical Pathology, 5 guineas. And class prizes in the various subjects.

**Fees.**—(a) For course required by Conjoint Board. In one payment of 120 guineas, or two payments of 65 guineas each, payable on entrance and at the commencement of second year respectively, or by six payments, distributed over six sessions, of 24 guineas each. These sums include the subscriptions for membership of the Clubs' Union. (b) For the entire course of the University of London the composition fee is 130 guineas. Fees for shorter periods or for single courses may be learned on application to the Dean. Fees for dental students, payable in one sum on entrance, 50 guineas, or in two instalments, of £27 10s. each.

**LONDON SCHOOL OF MEDICINE FOR WOMEN (ROYAL FREE HOSPITAL).**—The school is situated in Hunter Street, and the Royal Free Hospital is in Gray's Inn Road, close by. Students are prepared for the London University examinations and of the various other Universities. A course of study is also specially arranged for the work required by the Royal Colleges of England, the Conjoint Colleges of Scotland and the Society of Apothecaries of London. The Royal Free Hospital contains 165 beds available for clinical study; and there is a large out-patient and casualty department. In addition to the ordinary systematic lectures at the school, clinical lectures are given at the hospital in medicine, surgery, obstetrics,

ophthalmology, and dermatology. Students hold clerkships and dresserships in each department.

**Appointments.**—A house physician, house surgeon, and a senior and junior resident obstetric assistant are appointed yearly. There are also non-resident appointments, including the anaesthetist and assistant anaesthetists, assistant and clinical pathologists, medical and surgical registrars, curator of museum and clinical assistants.

**Fees.**—The fee for the University of London course and the course for the Royal Colleges of England is £160 in one sum, or £170 if paid in five instalments. The fee for the course for the Conjoint Colleges or Society of Apothecaries, including Elementary Science, is £140 in one sum, or £150 in four annual instalments. Particulars as to Scholarships, &c., can be obtained from the Secretary, Miss L. M. Brooks, 8 Hunter Street, W.C.

**LONDON SCHOOL OF TROPICAL MEDICINE.**—The next session of the school commences on the 1st of October next in the much enlarged laboratories, which had become necessary owing to the increasing number of students who desire to take out the course at the school. The past year has been one of the most successful on record, and for the session ending in July 51 students took out the course. The accommodation of the school treats for only 42 students in the general laboratory, and about five in each of the special departments, thus recently the school has been very much overcrowded. Thanks to the generosity of a friend of the school the laboratories are being enlarged during the long vacation, and it is hoped when the school re-opens there will be sufficient accommodation for all who desire to go through the curriculum. The school provides three sessions each year, and in the future it is hoped that there will be room for 60 students each session. Arrangements are made in the neighbourhood for providing rooms where students can reside, and there is ample accommodation for all who desire to mess in the school.

### EXTRA-ACADEMICAL INSTITUTIONS IN LONDON.

**THE ROYAL DENTAL HOSPITAL.**—The teaching and hospital practice at this institution (situated in Leicester Square) are recognised by the various examining bodies. The new hospital and school which was opened seven years ago, is complete in every detail with modern appliances. The clinic of the hospital is unrivalled, no fewer than 105,000 operations being performed in one year. The following scholarships and prizes are open to all full term students:—Entrance scholarships, of the value of £50 and £25, being awarded in October. Subjects: Chemistry and Physics, Saunders scholarship, of the value of £20, awarded to the student obtaining the highest aggregate number of marks in the various class examinations. A scholarship of £25, the subjects being mechanical dentistry and metallurgy. There is also an Entrance Scholarship of £25 open to those who have studied "mechanical dentistry" under the tuition of a private practitioner. Storer-Bennet research scholarship of the value of £50, awarded once in three years; the Alfred Woodhouse scholarship of £30, and the Robert Woodhouse prize of the value of £10, for practical dental surgery. Class prizes are awarded by the various lecturers. Provision is made for teaching mechanical dentistry, as required by the Royal College of Surgeons, the pupils being under the guidance of the staff of dental surgeons assisted by specially appointed demonstrators. The school contains an excellent library and a well-arranged museum.

**Fees.**—For the two years' hospital practice and lectures as required by the Royal College of Surgeons of England, the fee is £53 3s. in one instalment, or £55 13s. in two yearly instalments. The fee for the complete curriculum, namely, two years' instruction in mechanical dentistry and two years' hospital practice and lectures, is £150 if paid in one sum, or 150 guineas if paid in three instalments of 50 guineas each. For one year's instruction in mechanical dentistry the fee is 50 guineas. For one year's

hospital practice, £21. The necessary course of two years at a general hospital can be taken simultaneously with that at the Royal Dental Hospital. Further particulars can be obtained on application to the Dean.

**NATIONAL DENTAL HOSPITAL.**—This institution is centrally situated (Great Portland Street, W.), and excellent teaching facilities and hospital practice are here obtainable, special demonstrations being given by members of the staff. There are also a mechanical laboratory, bacteriological laboratory, museum, students' common room, a metallurgical laboratory, extraction and stopping rooms, lecture hall, regulations room, &c., all lighted by electricity, and warmed and ventilated after the most approved requirements; in fact, this institution may be pronounced a model dental hospital and school. The winter session commences at the same time as at the medical schools, on October 1st. The medical tutors hold special classes before each college examination. The prizes include two entrance exhibitions, value £40 and £20, and the Rymer prize of £5 5s., the examinations for which are held in May and October. The fee for two years' hospital practice required by the curriculum, including lectures, is £40. (See advt.)

The two years' training in dental mechanics, required by the R.C.S. Curriculum, can be taken in the Mechanical Laboratory, and there is a "Composition Fee" including all the dental subjects of the curriculum of £120.

**THE ROYAL INSTITUTE OF PUBLIC HEALTH.**—The Royal Institute of Public Health, was founded in the year 1886, with the object of obtaining the registration of public health diplomas and the further statutory requirement that all Medical Officers of Health should possess such a qualification, by which means it has succeeded in placing at the head of every public health administration in the Kingdom, a properly trained and specially qualified medical officer. The Council, with the object of providing a Central Institution in London, not only for instruction for the diploma and for scientific work in connection with public health, but also one to which those engaged or interested in preventive or tropical medicine may resort have acquired large and important premises in Russell Square, for the purposes of the Institute, providing a common room for the use of Fellows and Members, a lecture room, a reference library, laboratories for bacteriological and chemical and physical research, and laboratories in which the course of instruction for the diploma in public health can be taken, fitted up with all modern improvements. The Institute is recognised as a public educational institution by the University of London, and its courses of instruction by the Universities and the Royal Colleges of Physicians and Surgeons.

**Medical students are admitted to the practice of the following Metropolitan and Special Hospitals to which no medical school is attached. Detailed particulars will be supplied on application to the various secretaries.**

**GREAT NORTHERN CENTRAL HOSPITAL,** Holloway Road, N.—This institution has been greatly enlarged, contains 179 beds, cases in various special departments are treated, and the hospital is now recognised for study during the fifth year by the Conjoint Board. The practice of the hospital is open to practitioners and senior students, and clinical and pathological assistants are appointed in the wards and out-patient departments, as in the larger general hospitals.

**WEST LONDON HOSPITAL,** Hammersmith Road, W.—(Only qualified medical men are admitted to the practice of this Hospital). This hospital contains 160 beds, and has an extensive out-patient department. Three house surgeons and three house physicians are selected every six months. There are special departments for diseases of the throat, nose and ear, skin, women and children, and deformities. Electrical and X-ray departments have also been added. The practice of this hospital is reserved exclusively for medical men, junior students not being admitted.

**BETHLEM ROYAL HOSPITAL.**—In this Royal institution only cases of lunacy are received, and students intending to pursue this special branch have the best possible opportunities afforded here. The hospital contains 300 beds, and two resident house physicians who have recently obtained their diplomas to practise medicine and surgery are elected every six months, and are provided with apartments, complete board, attendance, washing, and an honorarium of 25 guineas per quarter. The students of certain specified London medical schools receive clinical instruction in the wards of the hospital, and qualified practitioners may attend for a period of three months on payment of a fee. Post-graduate lectures are also given.

**NATIONAL HOSPITAL FOR EPILEPSY AND OTHER DISEASES OF THE NERVOUS SYSTEM,** Queen Square, W.C., contains 200 beds. This institution is recognised by the Conjoint Board where part of the fifth year of study may be devoted to clinical work. Clinical clerks are appointed to the physicians for out-patients, and courses of lectures and clinical demonstrations are given each year.

**LONDON TEMPERANCE HOSPITAL.**—The hospital contains 110 beds, and is conducted as its name implies on non-alcoholic principles by an excellent staff. The medical and surgical practice is open to students and practitioners. Appointments (vacancies for which are advertised in the medical journals): Surgical and medical registrars, resident medical officer, and one assistant resident medical officer.

**METROPOLITAN HOSPITAL,** Kingsland.—This was until recently known as the Metropolitan Free Hospital, is situated in the north-eastern district of the Metropolis, and contains 160 beds. It is a general hospital, with various special departments for the treatment of diseases of the eye, throat, ear, &c.

**PRINCE OF WALES HOSPITAL TOTTENHAM.**—This hospital contains medical and surgical wards and a ward for children, having in all 73 beds. There are special departments for gynaecological cases, diseases of the eye, ear, throat and nose, and skin diseases. It has now been authorised by the University of London to give certificates of post-graduate study for the M.D. and M.S. degrees.

#### HOSPITALS FOR CONSUMPTION.

**HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST,** Brompton.—The largest institution for the treatment of affections of the chest in the United Kingdom, there being 318 beds in the two buildings. There are four house physicians who reside in the hospital, each for a period of six months. Lectures and demonstrations are given by members of the medical staff on Wednesdays and Fridays at four o'clock, save during the vacations. Terms, £2 2s. for three months; £5 5s. perpetual. This hospital is recognised by the Conjoint Board, the University of London, and the Apothecaries' Society.

**MOUNT VERNON HOSPITAL,** Hampstead and Northwood.—This institution, formerly called the North London Consumption Hospital, now carries on its work at Hampstead with 145 beds, and at Northwood with 100 additional beds, where treatment is carried out on the most modern lines, including the "open air" and other systems. Students are admitted to the practice of the hospital under certain conditions, and post-graduate courses are regularly delivered during the year.

**CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST,** Victoria Park.—This is a large and well-equipped hospital at the East End, containing 176 beds. Clinical lectures and demonstrations are given by the members of an exceptionally experienced staff. Fee for three months' attendance on hospital practice, 2 guineas; six months, 3 guineas.

**ROYAL HOSPITAL FOR DISEASES OF THE CHEST,** City Road.—(80 beds.)—This hospital has been enlarged by the addition of a very complete out-patients' department, and also by the erection of a new wing, which provides accommodation for 80 in-patients.

#### THROAT AND EAR HOSPITALS.

**METROPOLITAN EAR, NOSE, AND THROAT HOSPITAL.**—This hospital was founded so far back as 1838, and

is situated in Grafton Street, Tottenham Court Road. The out-patient department is open daily at 2.30 p.m. to practitioners and students for acquiring clinical instruction and technical knowledge. Operations are performed on in-patients on Tuesdays, Wednesdays, Thursdays and Fridays at 9.30 a.m. Fee for one month's attendance at the hospital one guinea, and for three months two guineas. During the forthcoming session demonstrations will be given by members of the staff on the pathology and treatment of diseases of the ear and respiratory passages. Weekly clinical lectures are given by the staff on the special disease treated at the hospital.

**HOSPITAL FOR DISEASES OF THE THROAT,** Golden Square, W.—This hospital has been recently rebuilt and contains 40 beds. Clinical instruction is given daily in the Out-patient Department on diseases of the nose, throat, and ear, and systematic courses of lectures are given during the winter session. There are nine clinics weekly, and an annual out-patient attendance of nearly 50,000. Major and minor operations daily (Mondays excepted) in different theatres. Four senior and thirty-six junior clinical assistants are appointed from among the students to assist the surgeons. Students are admitted to the practice of the hospital at the following fees:—Three months, £5 5s.; six months, £7 7s.; longer periods, £10 10s. Further details can be had by applying to the Hon. Med. Secretary.

**CENTRAL LONDON THROAT AND EAR HOSPITAL.**—This hospital contains accommodation for 26 in-patients. It has a very extensive out-patient department (over 50,000 attendances yearly), which is open daily to all medical practitioners and students, for the purpose of clinical demonstration and instruction. Courses of practical teaching are held twice weekly by members of the staff, which are open to qualified practitioners and advanced students. Each course is of about seven weeks' duration, and includes hospital attendance for that period.

Operations are performed daily (Saturday excepted) at 2 p.m. Special attention is devoted to scientific work in the newly-equipped laboratory. Full particulars will be supplied on application to the Dean.

#### WOMEN AND CHILDREN.

**HOSPITAL FOR SICK CHILDREN,** in Great Ormond Street, Bloomsbury, and Cromwell House, Highgate.—Fee for three months' attendance, £3 3s.; perpetual, £5 5s.; £1 1s. for students satisfactorily undertaking clinical clerkships for not less than three months. There are now 222 beds, besides 38 additional at the convalescent branch.

The practice of the Hospital is open to qualified medical men, and to students who have completed four years of medical study, the Hospital having been recognised by the Conjoint Board of England as a place where six months of the fifth year may be spent in clinical work. There are special ophthalmic, aural, dental, and electrical departments. There is also a Museum and Library in connection with the School. Lectures are given every Thursday afternoon during session by members of the staff, and certificates are granted.

For tickets and further information, apply to the Secretary, by letter, or by calling at the Hospital.

**QUEEN CHARLOTTE'S LYING-IN HOSPITAL,** Marylebone Road, N.W.—Qualified medical practitioners and medical students are admitted to the practice of this hospital. Certificates of attendance are recognised by all universities, colleges and licensing bodies. Fee for the course of four weeks, £8 8s. Students are accommodated at the new Residential College (5, Cosway Street) opposite the hospital.

Arrangements have also been made for the preliminary instruction in midwifery now required by the General Medical Council. This will include:—(1) Practical instruction in the methods of examination of pregnant women; (2) delivery of women in labour under the direct supervision of a medical officer of the hospital; (3) practical instruction in the treatment of the mother and child during the puerperium, in-

cluding clinics held four times weekly by the visiting medical staff. Fee for this special course for the month will be £5 5s.

**ROYAL WATERLOO HOSPITAL FOR CHILDREN AND WOMEN.**—This important institution, situated in South London has been rebuilt and appointed on completely modern lines, and now provides 90 beds.

**THE SAMARITAN FREE HOSPITAL FOR WOMEN** Marylebone Road, N.W., offers excellent opportunities to qualified medical men for clinical study and training in the details of operative gynaecology. Fee: Three months, £3 3s. The success of the staff in this department has gained for them a European reputation. There are 51 beds.

**THE HOSPITAL FOR WOMEN, Soho Square.**—The hospital contains 61 beds. In connection with this institution there is now an organised school of gynaecology open to qualified medical men and to students after their third year. Clinical assistants to the physicians and surgeons in the in-patient and out-patient departments are appointed every three months. Fee for the three months' course, and certificate, £8 8s.

**CHELSEA HOSPITAL FOR WOMEN, FULHAM.**—This institution contains 50 beds, and is served by a staff of considerable eminence. In connection with it there is a Convalescent Home at St. Leonards, in which 22 additional beds are at the disposal of the authorities.

#### EYE HOSPITALS.

**ROYAL LONDON OPHTHALMIC HOSPITAL,** formerly in Moorfields, and recently rebuilt in the City Road, is the largest hospital devoted to this specialty in Great Britain, and contains 138 beds. Students and practitioners are admitted to the practice daily at 9 o'clock. Operations, 10 o'clock and after. Fee for six months, £3 3s.; perpetual, £5 5s. Further particulars of the Secretary.

**ROYAL WESTMINSTER OPHTHALMIC HOSPITAL,** adjoins Charing Cross Hospital in King William Street. It has about 40 beds and a very large out-patient *clinique*. The lectures and demonstrations are arranged with special reference to the requirements of practitioners and senior students. Fee, six months, £3 3s.; perpetual, £5 5s.

**ROYAL EYE HOSPITAL, St. George's Circus, Southwark.**—There are 40 beds and two cots. Fees, £2 2s. for three months, £3 3s. for six months, and £5 5s. perpetual. Courses are held on ophthalmoscopy, refraction, and diseases of the eye; fee, £1 1s. for each course, but perpetual students may attend each course once without extra fee. Pathology class, £1 1s. extra to cover cost of materials.

**CENTRAL LONDON OPHTHALMIC HOSPITAL.**—This hospital is situate in the Gray's Inn Road, has 26 beds and a large out-patient *clinique*. The post of clinical assistant is open to both men and women, who must be duly qualified and registered practitioners. During the winter session commencing in October lectures and demonstrations will be given in all the branches of ophthalmology. For syllabus and further particulars apply to the Dean.

#### SKIN HOSPITALS.

**ST. JOHN'S HOSPITAL FOR DISEASES OF THE SKIN.**—Out-patient department, Leicester Square; In-patient department, Uxbridge Road, W. This hospital has a well-equipped in-patient department, with 45 beds. It has a School of Dermatology at 49 Leicester Square, which is conducted by the medical staff of the hospital. During the past year the free course of Chesterfield Lectures have been well attended. The Out-patient Department has recently been rebuilt at a cost of £10,000, and contains a spacious laboratory and special electrical department which can be seen in operation every afternoon except Saturday. Clinical demonstrations are given every Monday at 2 p.m.; Tuesday at 2 p.m., Wednesday at 3 p.m.; Thursday

at 2 p.m., and Friday at 2 p.m., on Selected Cases. (See Advt.)

One of the oldest institutions of the kind is the Western Skin Hospital (Great Portland Street), which was started as long ago as 1851. The practice of the hospital is open to students and practitioners. Students of this specialty have also the London Skin Hospital, in Fitzroy Square, with seven beds and an out-patient department of over 1,400.

#### METROPOLITAN POST-GRADUATE INSTITUTIONS.

**MEDICAL GRADUATES' COLLEGE AND POLYCLINIC.**—This institution affords to medical men special facilities for acquiring technical skill, and advancing their medical and scientific knowledge. The building, which is large and commodious, is situated in Chenies Street, Gower Street, and contains lecture and consulting rooms, pathological and clinical laboratories, Röntgen ray room, an ophthalmoscope room, a library and museum, and reading and smoking rooms. *Cliniques*, at which patients are shown, are given every day of the week except Saturday, at 4 p.m. Lectures on Medicine, Surgery, and other allied subjects are delivered on Mondays, Tuesdays, Wednesdays, and Thursdays at 5.15 p.m. Four sessions of practical classes, each lasting six weeks, and a vacation session of three weeks' duration, are held during the year, the subjects taught comprising ophthalmology, otology, clinical microscopy, laryngology, urinary analysis, gynaecology, applied anatomy, nervous diseases, and practical X-ray work. There are, in addition, extra-mural classes in operative surgery and practical anatomy with dissecting. Special tutorial classes in medicine, surgery, midwifery, and pathology for gentlemen reading for the higher qualifications have recently been instituted, and are conducted regularly throughout the year.

The annual subscription for medical practitioners of either sex is One Guinea. Full information may be obtained from the medical superintendent, Major Vint, M.B., 22 Chenies Street, Gower Street, W.C.

**WEST LONDON POST-GRADUATE COLLEGE.**—The West London Hospital, Hammersmith Road, W., contains 160 beds; the post-graduate course was started in 1895, and this is the original post-graduate college in London attached to a general hospital. Instruction is given in the out-patient department daily at 2.15 p.m. by the assistant physicians and assistant surgeons. The physicians and surgeons attend daily at 2.30 p.m., when post-graduates can accompany them in their visits to the wards. Operations are performed daily at 2.30 p.m. There are lectures every evening at 5 p.m. (Saturdays excepted). Special classes are held in bacteriology, diseases of the eye, throat, X-rays, anaesthetics, intestinal surgery, tropical medicine, cystoscopy, operative surgery, &c.

**Fees.**—The fee for the hospital practice including all the ordinary lectures and demonstrations, is £1 1s. for one week; £3 3s. for one month; £6 6s. for three months; £9 9s. for six months; £15 15s. for one year, and £25 for a life ticket. A course of attendance on either the medical or surgical practice alone may be taken out for the fee of £4 4s. for three months. The fee for three months' attendance in any one special department, other than medicine or surgery is £3 3s. A prospectus containing full particulars will be forwarded on application to Mr. L. A. Bidwell, Dean.

**NORTH-EAST LONDON POST-GRADUATE COLLEGE.**—This post-graduate school is established in connection with the Prince of Wales's General Hospital, Tottenham, N., which is recognised by the University of London as a place of post-graduate study for the M.D. and M.S. degrees, and by the Admiralty and the India Office for purposes of study leave. Facilities are here afforded to qualified medical practitioners for taking part in the work of an active general hospital, and for attending demonstrations in various branches of medicine, surgery, and gynaecology, with opportunities for clinical instruction in diseases of the eye, ear, throat, nose, skin, in fevers,

psychological medicine, the administration of anæsthetics, radiography and dentistry. Cliniques, lectures and demonstrations are given by members of the teaching staff in the lecture room, in the wards, in the various out-patient departments, and in certain affiliated institutions. Operations are performed every afternoon of the week, except Saturday. Special classes, the attendance at which will be limited, are arranged in gynaecology, the surgical diseases of children, including orthopaedic surgery, diseases of the throat, nose and ear, diagnosis of diseases of the nervous system, ophthalmoscopy and refraction, analysis of gastric contents, clinical examination of the blood, diseases of the skin, abdominal surgery, radiography, bacteriology (which is accepted by the University of Cambridge for the D.P.H. diploma) and medical electricity. The fee for a three months' course of study, which may be begun at any time, in any single department, is one guinea. A fee of three guineas admits to the whole practice of the hospital for a similar term (one month, 2 guineas), and a perpetual ticket for the practice of the hospital may, for the present, be obtained on payment of a fee of 5 guineas. The opening lecture of the Winter Session will be given by Mr. J. Bland-Sutton at 4 p.m., on Thursday, October 7th. Additional information with a syllabus of lectures, demonstrations, and special classes, may be obtained from the Dean of the Post-Graduate College, Dr. A. J. Whiting, at the Hospital, or at 142 Harley Street, W.

**LONDON POST-GRADUATE ASSOCIATION.**—This Association offers facilities for Clinical Study to qualified medical men. Joint cards of admission are issued to the Clinical Instruction of the following General Hospitals and Schools of Medicine:—Charing Cross, Guy's, Westminster, St. Thomas's, University College, St. Mary's, King's College, besides several special hospitals. *Fees.*—For three months, 10 guineas; for six months, 15 guineas; and for any longer period at the further rate of 9 guineas for each additional six months. Further particulars may be obtained of the Secretary, London Post-Graduate Association, Examination Hall, London, W.C.

**THE LONDON SCHOOL OF CLINICAL MEDICINE** is entirely reserved for qualified practitioners, no unqualified students being allowed to attend its clinics and classes. The school is held at the Seamen's Hospital, Greenwich, with which are affiliated for teaching purposes the Royal Waterloo Hospital for Children and Women, the Bethlem Hospital, and the General Lying-In Hospital, all within the South-Eastern district. The Dreadnought Hospital is situated at Greenwich, and contains 250 beds, which are continually occupied by patients suffering from every variety of disease. It provides annually for 2,000 in-patients and 19,000 out-patients. The out-patient department at the Dreadnought Hospital is supplemented by the Society's dispensaries in the East India Dock Road, and at Gravesend, at which the present annual attendance is approximately 4,000 patients. The hospital is easily reached from London:—(a) By train from Charing Cross or Cannon Street to Greenwich Station, which is within five minutes' of the hospital. (b) By train from Charing Cross or Cannon Street, or from District and Metropolitan Stations to New Cross, and thence by electric tram (seven minutes). Out-patient clinics are held in surgery, medicine, and the special departments every morning; whilst in the afternoons ward clinics are given in medicine, in surgery, and in one of the special departments. Operations are performed daily. The fee for attendance on the ordinary practice of the hospital provides for admission to the wards, operating-theatres, post-mortem rooms, out-patient rooms, and clinics; and practical classes are arranged each session in all the usual subjects of medicine and surgery.

**The following are some of the principal provincial hospitals having the greatest number of beds, to which students are admitted where clinical in-**

**struction can be obtained, but to which there is no medical school attached:—**

**ROYAL BERKSHIRE HOSPITAL.**—The town of Reading, in which this hospital is situated, has a very large working-class population, and excellent opportunities for clinical instruction in the wards and extensive out-patient department are afforded here. It contains 160 beds, a splendid library, in which the Reading Pathological Society holds its meetings.

**BRADFORD INFIRMARY.**—The hospital contains 220 beds. Non-resident pupils are received and abundance of clinical material is obtainable. One year's attendance is recognised by the Examining Boards. Fee, perpetual, £10 10s.

**ROYAL DEVON AND EXETER HOSPITAL, Exeter.**—This hospital contains 200 beds (including special children's wards), and numbers on its staff several well-known names; has a good library. Attendance on the practice of this hospital qualifies for all the examining boards, and students can attend Midwifery on application to the House Surgeon. Arrangements may also be made by which practitioners may have the use of the museum and library, and other facilities.

**LEICESTER INFIRMARY** is duly recognised by the various examining bodies, and contains 198 beds (to be shortly increased to 230), and at the Children's Hospital in connection 42; total, 240. A new wing containing 100 beds has recently been added, and a new Nurses' Home is in course of erection.

**LIVERPOOL NORTHERN HOSPITAL**, which has recently been rebuilt, now contains 240 beds, and is completely equipped with the most modern appliances. Clinical instruction is given by the staff during the summer and winter sessions. Clinical clerkships and dresserships are open to all students without additional fees. Fees for hospital attendance: Perpetual, £26 5s.; one year, £10 10s.; six months, £6 6s.; three months, £4 4s.; practical pharmacy, £2 2s.

**THE LIVERPOOL SKIN HOSPITAL AND EXTRA-MURAL SCHOOL OF DERMATOLOGY**, in Pembroke Place, has eight beds and an Out-patient Department where over two thousand different patients are registered annually, and is open to Senior Students and Practitioners of Medicine. There is an excellently equipped "Light" Department where instruction is given in X-Ray and Finsen Light Therapy, and attached to the Hospital is a Museum of Dermatology. Terms for private instruction, 10 guineas per month.

**NORFOLK AND NORWICH HOSPITAL.**—This hospital is recognised by the Colleges, and contains 210 beds. Fees, £10 10s. for six months, £15 15s. for twelve months' medical and surgical practice. Pupils, resident and non-resident, are admitted.

**NORTH STAFFORDSHIRE INFIRMARY, Hartshill, Stoke-on-Trent.**—This institution is built on the pavilion plan, and has accommodation for over 200 patients, including children's wards, women's wards, and a special department for the treatment of diseases of the eye, so that there are excellent facilities here for acquiring a practical knowledge of the profession.

**NOTTINGHAM GENERAL HOSPITAL.**—As a large commercial and industrial centre, Nottingham boasts of a large general hospital and several special institutions. The General Hospital contains 241 beds, and is staffed by several well-known physicians and surgeons. The practice is open to qualified members of the profession, and house appointments obtained hereat yield valuable material for study, especially in the direction of accidental injuries.

**SUSSEX COUNTY HOSPITAL, BRIGHTON.**—This hospital possesses about 200 beds, as well as a large out-patient department, and a well-appointed clinical research and bacteriological department. Hospital practice may be gained here for a period not exceeding two years on payment in advance of a fee of 20 guineas. There is also an excellent library attached.

**WOLVERHAMPTON GENERAL HOSPITAL.**—The hospital contains 210 beds, attendance at this hospital being recognised by all the Examining Boards. Pupils are trained in clinical work by the medical and surgical staff. *Fees:* Six months, £6 6s.; twelve months, £10 10s.; perpetual, £21.



## Ireland.

### THE IRISH MEDICAL SYSTEM.

THE system of medical teaching in Ireland differs from that in England in important particulars. In London each clinical hospital has its attached medical school, which is fully equipped, and which educates the students of that hospital and very seldom those of any other. In Dublin, on the contrary, the hospitals and schools are entirely separate (except that Sir Patrick Dun's Hospital is officially connected with Trinity College), and a student of any school is free to enter for the whole or any part of his course at any school or hospital he pleases.

#### COST OF MEDICAL EDUCATION IN IRELAND.

The cost of obtaining a medical qualification depends to some extent on the qualification sought. In this connection the following tables may be of use to the prospective student:—

#### COST OF MEDICAL EDUCATION.

School of Physic, Dub. Univ. ...	£122 17s.
Royal College of Surgeons School ...	£124 19s.
Catholic University School ...	£124 19s.
University Colleges ...	About £110
Queen's University, Belfast ...	£104

#### COST OF DIPLOMAS OR DEGREES.

Dublin University	—	£27 (to this must be added £83 4s., the cost of obtaining an Arts degree).
Royal University	—	£15.
Conjoint Royal Colleges	—	£42.
Apothecaries' Hall	—	£22 1s.

Thus, the absolute payment will amount to somewhere between £125 and £233 1s. according as the teaching of the University Colleges and the degrees of the Royal University, or the teaching and degrees of Dublin University, are taken. For the Conjoint Colleges the entire cost is £166 19s., taking the minimum mode of payment. So that, assuming that extras or voluntary costs are incurred, the total will vary, say, from £170 to £200. "Grinding," although not officially recognised, occupies a position almost identical with that of the extra-mural instruction of other schools. Its cost must be reckoned among the expenses of the course, for, while not essential, it has become customary for almost all students to obtain aid in their studies in this way. As a rule, this private instruction costs about £5 5s. for each of the four examinations.

The above sum, or something like it, may be expended by the student or his parent in paying for lectures, &c., and examination fees as they fall due, and there is no difficulty in obtaining the needful information for his guidance if he likes to pay for his course in this fashion.

All the Dublin schools require fees for each course to be paid in advance.

Women are admitted to all the courses, degrees, and licences on the same terms as men.

#### DATE OF ENTRY.

The entry of names and commencement of study in Ireland is supposed to date from the 1st of October in each year, but entries are accepted up to the end of that month, or in some schools even later. It should be remembered that no credit is given for studies or attendance until the entry is regularly made. The student must attend three-fourths of the lectures delivered, and if he loses any time at the beginning he must make up for it afterwards by constant attendance.

The student begins work by attending a recognised medical school each morning at ten o'clock, and occupying his day, to five p.m., between lectures and dissections. His vacations are a fortnight at Christmas and a fortnight at Easter, and the academic year ends at the end of June.

#### PRELIMINARY EXAMINATIONS.

The first act of the student is to pass a preliminary examination, without which he cannot get credit for any medical studies pursued. The next is to commence medical study. This he does by entering for lectures

at a medical school. From the school registrar he gets a form of certificate, and his third act is to take it or send it to the Branch Medical Council, 35 Dawson Street, Dublin, unless, as is usually the case, this duty is undertaken for him by the school registrar. He is thereupon placed upon the Register of Medical Students (without fee), and his period of study counts from that date. He must register at the earliest possible moment, or he may lose credit for his work.

The only preliminary examination held specially for medical students is that held conjointly by the Royal Colleges of Physicians and Surgeons, but other examinations, e.g., the public entrance at Trinity College, the matriculation of the Royal University, the Intermediate Examination passes in the required subjects, and certain other examinations recognised by the General Medical Council, are accepted as equivalent.

The subjects of examination as prescribed by the General Medical Council are as follows:—1. English language, including a specified author, dictation, grammar, and composition; also parsing and analysis from a book specified. 2. Latin, including grammar, translation from specified authors, and translation of easy passages not taken from such authors. 3. Elements of mathematics, comprising (a) arithmetic, including vulgar and decimal fractions; (b) algebra, including simple equations; (c) geometry, Euclid, Books I., II., and III., with easy deductions. 4. One of the following optional subjects:—(a) Greek, (b) French, (c) German.

#### THE IRISH LICENSING BODIES.

The Medical Licensing Bodies of Ireland are five in number, and, as a rule, students will gravitate into one or other of five classes:—a. Those who enter Trinity College, and take a full graduation in Arts in addition to their professional degrees. b. Those who take the licence of the conjoint Royal Colleges of Physicians and Surgeons. c. Those who take their qualifications at the Royal University of Ireland, where graduation in Arts is not necessary. d. Those who enter Queen's University, Belfast, and take their course and degrees there. e. Those who take the licence of the Apothecaries' Hall. f. Those who pursue their studies in Ireland, but who migrate to London, Edinburgh, or Glasgow for their licences. Almost all these last-named emigrants come from the Queen's Colleges, and the greater number of them from Belfast, while the Dublin students qualify, as a rule, in Dublin.

We do not attempt to give details as to the requisite courses of instruction for degrees or diplomas, as our epitome must necessarily be insufficient for the information of the student, and we can occupy our available space with information more useful to him. The official information upon which students may depend can be obtained by sending a note to the Registrars of the Licensing Bodies or Schools.

Note.—It is necessary to note that, consequent on the passing of the recent Universities Act, the Royal University will soon cease to exist. Its place will be taken by the new National University, having constituent University Colleges in Dublin, Cork, and Galway, and the Queen's University situated in Belfast.

#### THE UNIVERSITY OF DUBLIN.

The University of Dublin grants the degrees of M.B., B.Ch., and B.A.O. to students who have obtained their Arts degree, and who have been for at least five academic years on the books of the Medical School, and the higher degrees of M.D., M.Ch., and M.A.O. to graduates of certain standing who hold the degrees of M.B., and B.Ch. It does not grant degrees to any but graduates in Arts, and consequently its degrees hold the highest rank of social and educational qualifications, and are sought for by those who look forward to occupying the best positions in the profession.

The expense of obtaining the degrees of M.B., B.Ch., and B.A.O. is approximately as follows:—Lectures, £67 4s. 6d.; Hospitals, £55 13s.; Degree Fees, £27.—Total, £149 17s. 6d.

The expense of the B.A. degree, amounting altogether to £83 4s., should be added, making the total cost £233 1s. 6d.

In addition to its ordinary qualifications the University grants the following higher degrees:—

**Doctor of Medicine.**—To obtain this the candidate must have passed the final examinations, and be of M.A. standing. He must then read a thesis before the Regius Professor of Medicine. Fee for this degree, £13.

**Master of Surgery.**—The candidate must be a Bachelor in Surgery of three years' standing, and must then pass an examination in clinical surgery, operative surgery, surgical pathology, surgery, and surgical anatomy (on the dead subject). Fee for this degree, £11.

**Master in Obstetric Science.**—The candidate must have passed the M.B. and B.Ch. examinations, and have completed, in addition to the courses for M.B., B.Ch., a course of obstetric medicine and surgery. He is then required to pass an examination in the following subjects:—Practice of midwifery, gynaecology, anatomy of female pelvis and elementary embryology, and clinical gynaecology. Fee for this degree, £5.

**Diplomate in Medicine, Surgery, and Midwifery.**—Candidates for the diplomas in Medicine, Surgery, or Obstetric Science must be matriculated in Medicine, and must have completed two years in Arts and five years in medical studies. The medical course and examinations are the same as for the degrees. Fees for the diplomas in medicine, surgery, and midwifery, £21. A diplomate, on completing his course in Arts and proceeding to the degree of B.A., may become a Bachelor of Medicine on paying the degree fees.

**Diploma in Public Health.**—The candidate must be an M.D. or a Graduate in Medicine and Surgery of Dublin, Oxford, or Cambridge, or an M.D. of London University; must have completed, subsequent to obtaining a registrable qualification, six months' practical instruction in a laboratory in practical work in chemistry and bacteriology applied to public health; he must have studied practically outdoor sanitary work for six months under an approved Officer of Health; and have attended, after qualification, for three months, the practice of a hospital for infectious diseases.

**Degree and Licence in Dental Science.**—Candidates for the degree in dental science must have taken a degree in Arts, and must have had their names in the books of the Medical School for five years. Two examinations must be passed—namely, the Previous Dental at the end of the second year, and the Final Dental at the end of the fifth year. Candidates for the Licence are required to matriculate in Arts, and pass one Term Examination. The course of study is the same as for the degree with the exception that no lectures in pathology or bacteriology are required. The total fees for the licence, including the premium for Dental Mechanics (£100), are £200 17s., while those for the degree are about £210, to which must be added the cost of the B.A. degree.

**Post-Graduate Classes.**—A short post-graduate course is now given annually in June and July in connection with Trinity College Medical School. It includes special work on Diseases of the Eye, Nose, and Throat, Gynaecology, Diseases of the Skin, X-ray work, Medicine, Surgery (clinical and operative), and Clinical Pathology.

**Royal Services School.**—The object of this school is to prepare candidates for the Indian Medical Service, and Royal Army Medical Corps. It is conducted on a comprehensive scale, and affords special opportunities for operating on the cadaver, and for the study of commentaries. Two sessions are held yearly, each lasting for about ten weeks.

#### THE ROYAL UNIVERSITY OF IRELAND.

The Royal University of Ireland is purely an examining body. The cost of the M.B. and B.Ch. of the University, with all the necessary curriculum, is about £125. Some of the Arts examinations are conducted, not only in Dublin, but at certain local centres.

The University confers the following medical degrees:—

M.B., B.Ch., B.A.O., and the higher degrees of

M.D., M.Ch., and M.A.O. It also confers a Diploma in Public Health and a Diploma in Mental Diseases.

All courses are open to persons of either sex who shall have passed either the Matriculation Examination of the University or the Senior Grade Examination of the Intermediate Education Board for Ireland in the subjects prescribed for the Matriculation Examination of the University, and who shall apply for exemption from the Matriculation Examination in the year in which they shall have passed such examination.

The University examinations are held in the spring, beginning about the middle of April, and in the autumn, beginning towards the close of September.

All candidates for any degree must pass the Matriculation examination, or the Senior Grade Examination or the Intermediate Education Board (as above mentioned) and the First University examination.

The course for the degree of M.B., B.Ch., B.A.O., extends over five years.

Students will be admitted to the First University examination after one year from matriculation. Fee, £1.

The medical course consists of three previous examinations, one at the end of each year, and one degree examination at the end of the fifth year. Fee for each previous examination, £1; for the degree examination, £2; for the diploma, £10.

In addition, the following degrees are granted:—

**Diploma in Public Health.**—Conferred only on graduates in medicine of the University of at least twelve months' standing. Fee, £2. Subjects.—Meteorology, bacteriology, chemistry, physics, vital statistics, hygiene, sanitary engineering, architecture and law.

**The M.D. Degree.**—Conferred only on graduates in medicine of the University of three years' standing. They must at the same time produce a certificate of having been, for at least two academical years, engaged in hospital or private, medical, surgical, or obstetrical practice, or in the military or naval medical service. The examination comprises medical diseases and the theory and practice of medicine, including pathology. Every candidate will be examined at the bedside, and be required to diagnose at least three medical cases, and prescribe treatment, and to write detailed reports on at least two cases to be selected by the examiners and to discuss the questions arising therefrom. Fee, £5.

**The M.Ch. Degree.**—Conferred only on graduates in medicine of the University of three years' standing, and who can produce a similar certificate of practice to that required for the M.D. degree. The examination comprises surgery, both theoretical and operative; surgical anatomy; ophthalmology and otology. Fee, £5.

**The M. A. O. Degree.**—Conferred only on graduates in medicine of the University of three years' standing, and who can produce a similar certificate of practice to that required for the M.D. and M.Ch. degrees. The examination comprises midwifery and diseases of women and children. Fee, £5.

**Note.**—As stated above, this University will soon cease to exist. It is unlikely that any examination will be held after January 1, 1910.

#### NATIONAL UNIVERSITY OF IRELAND.

The regulations of this new body are not yet published. Its constituent Colleges are to be situated at Dublin, Cork, and Galway, and each College will have the right of conducting examinations which will carry with them the degree of the University. It is probable that the lines of the Royal University will to some extent be followed.

#### ROYAL COLLEGES OF PHYSICIANS AND SURGEONS.

These examinations are held conjointly by the two Colleges. The course, as in other bodies, extends over five years, with examinations at the end of the first, second, third, and final years. These examinations are conducted by examiners chosen by each of the Colleges for the subjects appropriate to them. The curriculum has recently been revised, and made of a more practical nature. In

common with the English Colleges, the subjects of the First Professional examination may be studied either at a medical school or at an institution other than a medical school recognised by the Colleges, after due inspection, for instruction in these subjects. We recommend students to apply for the official programme to the Secretary of the Committee of Management, Royal College of Physicians, or to the Registrar of either College. In the case of the Preliminary Examination seven clear days' notice must be given to the Secretary; fourteen days' notice is required from candidates for the Professional examinations.

The total of the examination fees, spread over the four examinations, is £42, while the school and hospital fees, if taken in Dublin, amount to £124 19s., making altogether £166 19s., exclusive of re-examination fees, which have to be paid in case the candidate fails to pass his examination.

The Conjoint Colleges also confer a diploma in Public Health, of which information will be found on page 259.

#### ROYAL COLLEGE OF PHYSICIANS, IRELAND.

This College issues a Licence in Medicine and a Licence in Midwifery to Registered Medical Practitioners.

*Licence in Medicine.*—The subjects of examination are:—Practice of Medicine, Clinical Medicine, Pathology, Medical Jurisprudence, Midwifery, Hygiene and Therapeutics.

*Licence in Midwifery.*—The subjects of examination are:—Gynaecology and Midwifery. A Registered Medical Practitioner of five years' standing is exempted from the examination by printed questions.

*Fees.*—Fee for the Licence to Practise Medicine £15 15s. Fee for the Licence to Practise Midwifery £5 5s.

*Membership.*—The Membership is open to University Graduates in Medicine and to Licentiates of the Royal Colleges of Physicians of the United Kingdom. The Examinations for Membership are held in January April, July, and October, and such other times as the President may appoint.

#### ROYAL COLLEGE OF SURGEONS, IRELAND.

This College grants a licence in Surgery to registered medical practitioners. Candidates who hold registrable surgical diplomas, including the licence of the Apothecaries' Society of London, and the Apothecaries' Hall, Dublin, granted since October, 1886, are admitted to examination without further evidence of study.

Candidates are examined in surgery, clinical and operative; surgical appliances; and ophthalmic surgery. The fee is £26 5s.

A diploma in Midwifery is also granted after examination to registered medical practitioners. Candidates must produce evidence of (a) attendance on a course of lectures on midwifery and diseases of women and children in a recognised school; (b) attendance or six months' practice at a recognised lying-in hospital or recognised dispensary for lying-in women and children; and (c) of having conducted at least thirty labour cases. The fee for the examination is £15 15s.

*Fellowship.*—Candidates for the Fellowship of the College must enter their names with the Registrar at least a month before the date of examination, in order that the Council may decide whether to approve of the application. Examinations are held the third Mondays in February, May, and November. If the application is approved, the candidate will be admitted to the next sessional examination or to a special examination (except during the months of August and September) if granted by the Council. Candidates are divided into two grades:—

Grade 1.—Licentiates or graduates in surgery of less than ten years' standing.

Grade 2.—Licentiates or graduates in surgery of more than ten years' standing. On and after January 1st, 1910, all examinations for the Fellowship will be conducted under the scheme now known as Grade 1. No candidate after the above date will, under any circumstances, be admitted to examination for the Fellowship of this College under the scheme now

known as Grade II., which will then cease to be used. Students, not either Licentiates or Graduates in Surgery, are permitted to present themselves for the Primary Examination under Grade I.

Candidates in Grade 1 must pass two examinations—Primary (in anatomy and physiology) and Final (in surgery). Candidates in Grade 2 need pass but one examination in surgery, surgical anatomy, and surgical pathology.

*Fees.*—Grade 1.—For Licentiates of College: Primary examination, £15 15s.; Final examination, £10 10s. Licentiates in Surgery of other licensing bodies: Primary examination, £26 5s.; Final examination, £15 15s. Students who have completed their second professional examination under the conjoint regulations: Primary examination, £5 5s.; Final examination, after obtaining the licence of the College, £21. Students of other licensing bodies: Primary examination, £10 10s.; Final examination, £31 10s.

Grade 2.—Licentiates of the College, £26 5s.; Licentiates in Surgery of other licensing bodies, £42.

*Licence in Dental Surgery.*—There is probably no specialty in surgery which gives as great a number of its practitioners a living and the prospect of an income as dentistry. A young man who has got his diploma and knows something of his business, and is willing to attend to it, seldom fails to get a substantial foothold in Ireland in a few years. The University of Dublin grants both a Degree and a Licence in dental surgery. To obtain the former, candidates must have taken a degree in arts; the licence is obtainable by all duly qualified persons who have passed the Public Entrance Examination of Trinity College, Dublin. The Royal College of Surgeons in Ireland grants a Licence in Dentistry.

*Course of Study for the Licence in Dentistry.*—Candidates are required to pass three examinations, viz.:—Preliminary (in General Education), Primary Dental, and Final Dental.

All information concerning this licence may be obtained from the Registrar of the College. The Primary Dental Examinations commence on the second Monday in the months of February, May, and November. The subjects of examinations include physics, chemistry (including metallurgy), anatomy, physiology and histology, and surgery. The fees for the primary Dental Examination amount to £10 10s.; and for re-examination, if rejected, £5 5s. The Final Dental Examinations commence on the Thursdays immediately following the Primary Dental Examinations. Candidates are examined in dental surgery, theoretical (including dental pathology), clinical, and operative; and in dental mechanics, theoretical, clinical, and practical (including the metallurgy of the workshop). Candidates must pass in all the subjects at the same time.

The fees for the Final Dental Examination in the case of candidates holding the L.R.C.S.I., or students who have passed the Primary Dental or Third Professional Examination of the College, £10 10s.; re-examination, £5 5s. The fees for Final Examination of all other candidates, £26 5s., and for re-examination, £10 10s. A rejected candidate will not be again admitted to examination until after a period of three months.

#### APOTHECARIES' HALL OF IRELAND.

The Licence of this Hall is granted to students who present certificates of having fully completed the course of study as laid down in the curriculum, and who pass the necessary examinations. The diploma of the Apothecaries' Hall of Ireland entitles the holder to be registered as a practitioner in medicine, surgery, and midwifery, and he also possesses the privileges of an apothecary.

There are four professional examinations, the total fees for which amount to 21 guineas. Women are eligible for the diploma.

Registered Medical Practitioners will receive the diploma of the Hall upon passing an examination in the subject or subjects not covered by their previous qualification, and on paying a fee of ten guineas; if

medicine or surgery is required, five guineas extra will be charged.

The fees payable for each examination are as follows : First Professional, £5 5s. ; Second, £5 5s. ; Third, £5 5s. ; Final Examination, £6 6s.

A candidate is allowed for each professional examination which he has completed at any other licensing body, except the Final. If he has passed only in some of the subjects in a given examination, he has to pay the whole of the fee for that examination.

The fees for re-examination are : For each subject, £1 1s., excepting in the subjects of surgery, medicine, and anatomy, the fees for which are £2 2s. each.

The fee for the Third and Final, or Final alone, is £15 15s., when the other examinations have been taken elsewhere.

All examination fees are to be lodged in the National Bank, College Green, Dublin, to the credit of the Examination Committee.

Applications and schedules, together with bank receipt for the fee, must be lodged with the Registrar, Apothecaries' Hall, 40 Mary Street, Dublin, at least fourteen clear days before the day of examination.

Candidates who desire to obtain the Letters Testimonial of the Apothecaries' Hall of Ireland, must, before proceeding to the Final Examination, produce evidence of having been registered as medical students for fifty-seven months ; also of having attended courses of instruction as follows :

One course each (winter course of six months) of the following : Anatomy (lectures), chemistry (theoretical), midwifery, practice of medicine, physiology and surgery. Dissections, two courses of six months each.

Courses of three months.—Materia medica, medical jurisprudence, chemistry (practical), practical physiology and histology, operative surgery, physics, clinical ophthalmology, biology, clinical instruction in mental disease, pathology, and a course in vaccination.

Medico-Chirurgical Hospital, twenty-seven months to be distributed over the last four years of study. The candidate may substitute for nine months in this, hospital attendance six months as a resident pupil.

Three months' study of fever.

Six months' practical midwifery and diseases of women.

Three months' practical pharmacy in a recognised clinical hospital or a recognised school of pharmacy, or a year in the compounding department of a licentiate apothecary or a pharmaceutical chemist.

Each candidate before receiving his diploma must produce evidence that he has attained the age of 21.

Each candidate must produce evidence of having before entering on medical studies passed a preliminary examination in general education recognised by the General Medical Council, and of having been registered by that Council as a student in medicine. Certificates of medical study will not be recognised if the commencement of the course to which the certificate refers dates more than fifteen days prior to such registration, except in the subjects of physics and biology. This registration is not undertaken by the Hall.

The details of the course of education required and syllabus of the examinations will be supplied on application to the Registrar, at 40 Mary Street, Dublin.

#### THE DIPLOMA IN PUBLIC HEALTH.

This diploma is granted by Dublin University, the Royal University, and the Conjoint Royal Colleges. Every candidate must be a registered medical practitioner. The examination is in :—(1) Chemistry (including chemical physics). (2) Engineering and architecture. (3) Sanitary law and vital statistics. (4) Hygiene. (5) Bacteriology. (6) Meteorology. The General Medical Council recommend that all candidates shall have studied in a special bacteriological laboratory, also for six months as pupil of a working medical officer of health, described, for Ireland, as "the medical officer of health of a county or of one or more sanitary districts having a population of not less than 30,000 ; or a medical officer of health who is a teacher in Public Health of a recognised medical school."

In addition to taking the prescribed course a candi-

date for the D.P.H. of the University of Dublin must be a Doctor in Medicine or a graduate in Medicine, Surgery, and Midwifery of Dublin, Oxford, or Cambridge, or a Doctor in Medicine of London, and his name must have been on the "Medical Register" for at least twelve months before the examination. The Royal University only confers its diploma on its own graduates.

#### THE DIPLOMA IN PSYCHOLOGICAL MEDICINE.

The Royal University of Ireland grants a diploma for proficiency in the treatment of mental diseases under the following conditions :—

The diploma is conferred only on graduates in medicine of the University. Candidates must give notice, in writing, to the secretaries of their intention to present themselves, and must pay the prescribed fee of £2 at least one month previous to the examination. Candidates who satisfy the examiners will be required to pay a further fee of £3 before the diploma is conferred. The subjects for this examination are those required by the Hutchinson Stewart Scholarship for proficiency in the treatment of mental diseases.

#### THE IRISH MEDICAL SCHOOLS.

The Irish Medical Schools are as follows :—

**THE SCHOOL OF PHYSIC OF DUBLIN UNIVERSITY.**—This school is formed by an amalgamation of the School of Trinity College and of the College of Physicians.

Every student of the school must be matriculated in Medicine, for which a fee of 5s. is payable, but he need not attend any of the Arts course unless he desires to obtain a University licence or degree in medicine, surgery, and midwifery. No student is permitted to matriculate unless he has passed the Entrance examination of the University, or some other examination recognised by the General Medical Council. Two medical scholarships are given annually at the School of Physic, value £20 per annum, tenable for two years, the examinations for which are held each year in June ; one scholarship is given in anatomy and institutes of medicine ; the other in zoology, chemistry, botany, and experimental physics. A prize of £100 is awarded by the Board to the successful candidate at a special examination in alternate years in medicine or in surgery, provided that the merit be deemed sufficient. The successful candidate is required to spend three months in the study of medicine or surgery, as the case may be, in Berlin, Paris, or Vienna. Before he can obtain the first instalment of £50 he must satisfy the Senior Lecturer that he possesses sufficient knowledge of a Continental language to derive full benefit from the prize. The examination is held in June, and is open to students who have passed the Final Examination in Medicine or in Surgery, as the case may be, within two years of the examination.

In order to obtain the second sum of £50 the prizeman must have furnished to the Regius Professor his formal report on the hospitals attended by him within two years from the time of obtaining the prize.

The Sir John Banks Medal and Prize, founded by the late Sir J. Banks, M.D., Regius Professor of Physics, are awarded to the best and second best answerers at the Medical Travelling Prize Examination.

The Edward Hallaran Bennett Medal and Prize, founded by pupils of the late Dr. E. H. Bennett, formerly Professor of Surgery, are awarded to the best and second best answerers at the Surgical Travelling Prize Examination. Class prizes are given at the end of the session of between £5 and £10 in value. The John Mallet Purser Medal, founded by Prof. Purser's past pupils, is awarded annually to the student who, at the ordinary June Intermediate Medical Examination, Part I., in Anatomy and Institutes of Medicine, shall obtain highest marks in Physiology and Histology, provided that he passes the examination in full.

**Fitz-Patrick Scholarship.**—This scholarship consists of the interest on £1,000. It will be awarded annually to the student who obtains the highest aggregate marks at the five sections of the Final Examinations, provided that he has completed his medical course in the prescribed period of five years.

**THE ROYAL COLLEGE OF SURGEONS IN IRELAND, SCHOOLS OF SURGERY.**—These schools are attached by Charter to the Royal College of Surgeons, and have existed as a department of the College for over a century. They are carried on within the College buildings, and are specially subject to the supervision and control of the Council, who are empowered to appoint and remove the professors, and to regulate the methods of teaching pursued. The buildings have been reconstructed, the capacity of the dissecting room nearly trebled, and special pathological, bacteriological, public health, chemical, and pharmaceutical laboratories fitted with the most approved appliances, in order that students may have the advantage of the most modern methods of instruction. There are special rooms set apart for lady students. The entire building is heated by hot-water pipes, and lighted throughout by the electric light.

All the lectures and courses of practical instruction may be attended by medical students who are otherwise unconnected with the College.

All the diplomas of the College are open to students of either sex. Separate rooms have been provided, and careful provision made for the instruction and comfort of women students.

**Prizes.**—The Barker Prize, £31 10s.; the Carmichael Scholarship, £15; the Mayne Scholarship, £8. The Gold and Silver Medals in Surgery and the Stoney Memorial Gold Medal in Anatomy.

Class Prizes of £2 and £1, accompanied by medals if sufficient merit is shown, will also be given in each subject. Prospectus and Student's Guide can be obtained on written application to the Registrar, Royal College of Surgeons, Dublin.

**THE CATHOLIC UNIVERSITY SCHOOL** is situated in Cecilia Street, Dublin. It prepares students for all medical examinations, particularly those of the Irish Colleges of Physicians and Surgeons, and the Royal University of Ireland. The school has recently been rebuilt and refitted, its working space having thereby been nearly doubled, and several new laboratories, including those for the study of bacteriology and public health, have been added. The institution has also been recently chartered, under the Educational Endowment (Ireland) Act, and it is now controlled by a Board of Governors. The total fees for school and hospital courses is £124 19s., payable as the courses are taken out.

The following Exhibitions are awarded annually:—Two first year's, value £12 10s. each; two second year's, value £10 each; one third year's Royal Exhibition of £12 10s.; one final Conjoint Colleges Exhibition of £12 10s.; two large gold medals, besides several other class medals. Molloy Prizes in Chemistry and Physics, Ambrose Birmingham Memorial Prize in Anatomy.

A Guide for Medical Students, which gives all the information required by parents, and by students who desire to join the medical profession, may be obtained free on application to the Registrar.

This school is likely to be merged in the medical school of University College, Dublin.

#### THE UNIVERSITY COLLEGES—CORK AND GALWAY.

These important academic institutions educate students for all colleges and degrees, and are maintained, as hitherto, by a Government grant. The same curriculum as that formerly adopted is continued, and the various exhibitions and scholarships are still available. Each college has the disposal of about £1,500 per annum in scholarships and prizes. The colleges are well adapted for high-class technical education, having lecture rooms provided with every appliance necessary in the modern training of a medical student. The colleges are completely equipped with students' reading rooms and lending libraries and refreshment rooms, and with all adjuncts to collegiate life, such as literary societies and athletic organisations. The expense of living in the collegiate towns is quite moderate. The course of lectures in the winter session must be diligently attended, no student obtaining a

certificate who has not put in three-fourths of a course. The scholarship examinations are held in October.

These Colleges are now constituent colleges of the National University of Ireland, and conduct examinations admitting to its degrees.

#### THE QUEEN'S UNIVERSITY OF BELFAST.

This University provides all the classes required for a complete medical curriculum. The University contains laboratories in connection with the departments of Biology, Chemistry, Physiology, Pathology, Anatomy, Physics, and Materia Medica. In connection, too, is a Students' Union, which gives students the advantage of dining-rooms, reading-rooms, a library, and various recreation rooms. Women are eligible as students. Clinical instruction is given at the Royal Victoria Hospital, which was rebuilt a few years ago, and has 300 beds, and at the Mater Infirmorum Hospital, which has 150 beds. Other hospitals open to the students of the University are: The Maternity Hospital, the Ulster Hospital for Women and Children, the Hospital for Sick Children, the Ophthalmic Hospital, the Benn Ulster Eye, Ear, and Throat Hospital, the Union Infirmary and Fever Hospital, the Fever Hospital, Purdysburn, and the District Lunatic Asylum.

**Scholarships.**—(1) Ten medical scholarships value £20 each; (2) two Dunville Studentships (one each alternate year), value £150 each; (3) one Andrews Studentship each alternate year, value £145; (4) numerous sessional prizes.

Additional scholarships will be open for competition at the medical examinations in March and June, 1910. There is also a Post-Graduate Research Fund open to all graduates of not more than three years' standing. Information regarding these scholarships, etc., may be obtained on application to the Dean of the Faculty of Medicine.

**Fees.**—The cost of the curriculum intended for students proceeding to the degrees of the Queen's University of Belfast is, approximately, £104. This includes examination fees and a perpetual ticket for attendance at the Royal Victoria Hospital or the Mater Infirmorum Hospital, but not fees for the special hospitals. The course for the Conjoint Board costs about the same amount.

A pamphlet containing full information regarding the new regulations for courses, fees, etc., can be had free of cost on application to the Registrar, Queen's University, Belfast.

#### UNIVERSITY COLLEGE, CORK.

The arrangements in the Faculty of Medicine are made chiefly with reference to the requirements of the Royal University of Ireland, but students proceeding for the examinations of the Conjoint Boards of England, Scotland, or Ireland, the Society of Apothecaries of London, or the Apothecaries' Hall of Ireland, can arrange the course of lectures which they attend, and the order in which they attend them, to meet the requirements of those bodies. Certificates of attendance in the college are also accepted by the University of Cambridge. The total fees for the college lectures and Hospital attendances required by the Royal University of Ireland is about £85.

The College is a Constituent College of the National University of Ireland, and will in future conduct the examinations for the Medical Degree of that University.

Clinical instruction is given at the North and South Infirmarys. Students can also attend the Mercy Hospital, the Cork Union Hospital, the County and City of Cork Lying-in Hospital, the Maternity, the Hospital for Diseases of Women and Children, the Fever Hospital, the Ophthalmic and Aural Hospital, and the Eglinton Lunatic Asylum. The winter session commences on October 20th, and ends at the end of April. The courses of the summer session are delivered in the months of April, May, and June.

**Scholarships and Prizes.**—Eight medical scholarships, two in each of the first four years, of the value of £25 each, and in the fifth year the Blaney Scholarship of the value of about £32, and a Senior Exhibition, value £30. Three Exhibitions, one in practical medicine, one in

practical surgery, and one in practical midwifery, each of the value of £15. Book prizes at the sessional examinations.

Further information can be obtained in the College Regulations, or on application to the Registrar, Queen's College, Cork.

#### UNIVERSITY COLLEGE, GALWAY.

Clinical teaching is carried on in the Galway Hospital, established as a Public General Hospital (in the place of the County Galway Infirmary) by Act of Parliament (1892). The Galway Fever Hospital and Galway Throat Hospital are also open to students. The medical lectures are recognised by the Royal University of Ireland and the various Licensing Bodies in the United Kingdom.

**Prizes.**—There are eight Junior Scholarships in Medicine of the annual value of £25 each. Two are tenable by matriculated students of the first, second, third, and fourth years. The Council has power to award exhibitions for distinguished answering. Sessional prizes are offered in each subject.

Like the sister College of Cork, this college is now a constituent college of the National University of Ireland.

#### ROYAL COLLEGE OF SCIENCE FOR IRELAND.

SESSION 1909—1910.

This College, situate in St. Stephen's Green, Dublin, supplies a complete course of instruction in science applicable to the industrial arts, especially those which may be cast broadly under the heads of Agriculture, Chemical Manufactures, Engineering, Physics, and Natural Science. A Diploma of Associate of the College is granted at the end of the three years' course. Non-Associate students may join for any course required. There are several entrance scholarships, (a) in Agriculture, and (b) in Science and Technology, tenable for three years, of the value of £50 each yearly, with free tuition. There are four Royal scholarships of the value of £50 each yearly, with free education, tenable for two years. Two are competed for by the first year associate students at the end of each session. All the laboratories and drawing schools are open daily for practical instruction. The Session commences on Tuesday, September 28, 1909. The Science Scholarship Examinations are held during the first week in July, the Examinations for Agricultural Scholarships in the first week in September, and the Entrance Examination for intending Associates in the third week of September, 1910. For further particulars and copy of college programme apply to the Registrar.

#### THE DUBLIN HOSPITALS.

THE clinical hospitals in Dublin are ten in number, exclusive of three lying-in hospitals. There are also two children's hospitals, an orthopaedic hospital, a fever hospital, an ophthalmic hospital, a dental hospital, and other special institutions. Some of the clinical hospitals, though they have no actual or official connection with any school, are in close affinity with certain teaching bodies; while others, again, are without any special connection with any school. While, however, such affiliation of a school or hospital may exist, it should be remembered that the Dublin schools and hospitals are open to all comers, and the student is competent to attend any hospital or any school he wishes, and to change his place of instruction from year to year as he may see fit.

The Irish Licensing Bodies require attendance on hospitals for twenty-seven months, i.e., three winter sessions of six months and three summers of three months, within the five years of study. The fee at all general hospitals is £8 8s. in winter, and for the summer £5 5s., or £12 12s. for the entire session of nine months if taken together.

#### GENERAL HOSPITALS.

**RICHMOND, WHITWORTH, AND HARDWICKE HOSPITALS.**—These hospitals contain over 300 beds. They are visited each morning at nine o'clock by the physicians and surgeons, and, in addition to the usual bedside instruction, clinical lectures

are delivered on the most important cases. Instruction is also given on various special branches of medicine and surgery. The Truss Establishment, for the distribution of trusses to the ruptured poor of Ireland, is connected with these hospitals. There are large ophthalmic, aural, throat, and gynaecological dispensaries, and instruction in these important subjects is given. A fully equipped, modern, pathological laboratory, and a new mortuary have been opened recently. Twelve resident clinical clerks are appointed each quarter, and provided with furnished apartments, fuel, &c. The appointments are open not only to advanced students, but also to those who are qualified in medicine and surgery. A house surgeon for the Richmond Hospital and a house physician for the Whitworth and Hardwicke Hospitals are elected every six months, and receive a salary. The Richmond Lunatic Asylum, containing 1,200 beds, adjoins these hospitals.

**MEATH HOSPITAL AND CO. DUBLIN INFIRMARY.**—This hospital was founded in 1753, and now contains 160 beds available for clinical teaching. A new building for the isolated treatment of fevers, containing 40 beds, has recently been added. The certificates of this hospital are recognised by all the Universities and licensing bodies of the United Kingdom. Medical and surgical resident pupils and clinical clerks and dressers are appointed every three months, and a house surgeon is elected annually. A prospectus giving the complete arrangements for medical and surgical classes for the coming session may be obtained from the Secretary of the Medical Board, Mr. William Taylor, F.R.C.S., 47 Fitzwilliam Square.

**THE ADELAIDE MEDICAL AND SURGICAL HOSPITALS.** occupy a central position within a few minutes' walk of the College of Surgeons and Trinity College. From October 1st, the physicians and surgeons visit the wards and give instruction at the bedside at the advertised hours. There is a large detached fever hospital, and there are also wards for infants and children. Operations are performed, at 10 a.m. on Tuesday, Thursday, and Saturday. Special hours are devoted to clinical instruction in the diseases peculiar to women, and students are individually instructed in the use of the stethoscope, ophthalmoscope, laryngoscope, and microscope; also special instruction is given on practical pathology and X-ray photography. Two House Surgeons are elected annually and four resident pupils half-yearly. Prize examinations, including examinations for the Hudson Scholarship, £30 and a gold medal, and Hudson prize of £10 and a silver medal, in addition to surgical, medical and dermatological prizes, are held at the termination of the session. The large dispensaries afford facilities for the study of eye, ear, throat, and cutaneous diseases, as well as of minor surgery and dentistry. Further particulars from Mr. Heuston, F.R.C.S.I., 15 St. Stephen's Green North.

**THE ROYAL CITY OF DUBLIN HOSPITAL.**—This hospital has recently been enlarged and improved to a very considerable extent. A special course of instruction is given on ophthalmic and aural diseases. There are special wards for the treatment of diseases of the eye, of children, and of women, and practical instruction is given on diseases peculiar to women; there is also a separate building for infectious diseases. Clinical clerks to the physicians and dressers to the surgeons are appointed from the most deserving of the class. A new operation theatre, sterilising room, and anaesthetic room have been constructed in accordance with the most modern surgical requirements. A department for Röntgen-ray and light treatment of lupus has recently been added. A resident medical officer is elected annually, and resident medical and surgical pupils are appointed from among the past and present students of the hospital. Operations are performed on Tuesdays, Thursdays, and Saturdays, at 10 a.m. Special classes for first year students. Full particulars can be had on application to Hon. Sec. Med. Board.

**SIR PATRICK DUN'S HOSPITAL** is situated on the south-eastern side of the city, and about a quarter of a mile



from the University School of Physic. It is officered almost exclusively by the professors and examiners in that school. Formerly all University students were compelled to attend this hospital, which was purely a medical institution, but many years ago the obligation was removed, and the hospital was opened for surgical cases. It is now open to all students. There is a special wing devoted to fever cases, and regular clinical instruction is given by the members of the medical staff throughout the winter and summer sessions. Special classes for students commencing their hospital studies will be held in the wards during the months of October, November, and December. They will embrace the elements of medicine and surgery, including note-taking. Opportunities are also afforded to students for examining cases of throat, ear, and eye diseases, as well as for performing minor surgical operations and bandaging. In the X-ray Department opportunities are given the members of the hospital class of seeing the various applications of the X-rays to the diagnosis and treatment of injury and disease. Arrangements have been made for practical instruction in anæsthetics.

**MATER MISERICORDIÆ HOSPITAL, Dublin.**—Consulting Physician: Sir Francis R. Cruise. Physicians: Sir Christopher Nixon, Bart., Dr. Joseph Redmond, Dr. John Murphy, and Dr. Martin Dempsey. Surgeons: Sir Arthur Chance, Mr. John Lentaigne, and Mr. Alexander Blaney. Assistant Physician: Dr. John O'Donnell. Assistant Surgeon: Mr. Farnan. Obstetric Physician: Dr. Robert Farnan. Ophthalmic Surgeon: Mr. Louis Werner. Surgeon for Diseases of Throat and Nose: Mr. Patrick Dempsey. Dental Surgeon: Mr. E. Sheridan. Pathologist: Dr. Edmond McWeeney. Assistant Pathologist: Mr. W. D. O'Kelly. Anæsthetist and Surgical Registrar: Dr. Patrick O'Farrell. This hospital, the largest in Dublin, at present containing 345 beds, is open at all hours for the reception of accidents and urgent cases. Clinical instruction will be given by the Physicians and Surgeons at 9 a.m. daily. A course of Clinical Instruction on Fever will be given during the winter and summer sessions. A certificate of attendance upon this course, to meet the requirements of the licensing bodies, may be obtained. Opportunities are afforded for the study of Diseases of Women in the ward under the care of the Obstetric Physician, and at the Dispensary held on Tuesdays and Saturdays. Ophthalmic Surgery will be taught in the Special Wards and in the Dispensary. Surgical Operations will be performed on Mondays, Tuesdays, Fridays and Saturdays at 11 o'clock. Connected with the hospital are extensive Dispensaries, which afford valuable opportunities for the study of general Medical and Surgical Diseases, and Accidents. Instruction will be given on Pathology and Bacteriology. Two House Physicians, six House Surgeons, and 16 resident pupils will be elected annually. Dressers and Clinical Clerks will also be appointed, and certificates will be given to those who perform their duties to the satisfaction of the staff. Leonard Prizes will be offered for competition annually. For further particulars see prospectus. Certificates of attendance upon this hospital are recognised by all the Universities and licensing bodies in the United Kingdom. Private Wards have been opened for the reception of Medical and Surgical cases. A Training School and a Home for Trained Nurses have been opened in connexion with the Hospital.

*Terms of attendance.*—Nine months, £12 12s.; six winter months, £8 8s.; three summer months, £5 5s. Entries can be made with any of the physicians or surgeons, or with the Registrar, Dr. Martin Dempsey, 35 Merrion Square. A prospectus containing in detail the arrangements for Clinical Instruction, Prizes, etc., may be obtained from the Secretary, Medical Board.

**MERCER'S HOSPITAL.**—This hospital, founded in 1734, is situated in the centre of Dublin, in the immediate vicinity of the Schools of Surgery of the Royal College of Surgeons, the Catholic University School of Medicine, and Trinity College. It contains 120 beds for medical and surgical cases, and arrange-

ments have been made with the medical officers of Cork Street Fever Hospital whereby all students of this hospital are entitled to attend the clinical instruction of that institution and become eligible for the posts of resident pupil, &c. There is a large out-patient department, and a special department for diseases peculiar to women. There are also special wards for the treatment and study of children's diseases. During the past few years the hospital has undergone extensive alterations in order to bring it up to modern requirements. A house surgeon is appointed annually. Five resident pupils are appointed, each for six months, and clinical clerks and dressers are appointed monthly from among the most deserving members of the class. The certificates of this hospital are recognised by all the licensing bodies. For further particulars apply to Mr. Seton Pringle, F.R.C.S., 27 Lower Baggot Street, Dublin.

**ST. VINCENT'S HOSPITAL** was established in 1834, it has 160 beds, and in connection with it there is a largely-attended dispensary, a convalescent home, and a nurses' institute. In addition to the ordinary clinical instruction, systematic courses of lectures are given in each department of medicine and surgery, and are illustrated by cases in the hospitals. The resident officers consist of two house surgeons, two house physicians, and six resident pupils. Three clinical lectures are delivered daily in the wards, illustrated by selected cases, and beginning at 9 a.m. Two gold medals and other valuable prizes and certificates of merit are awarded at the end of each session. A prospectus can be had from Mr. Fagan, 31 North Frederick Street.

**DR. STEEVENS' HOSPITAL**, situated at Kingsbridge, is the oldest and one of the largest clinical hospitals in Dublin, and contains over 200 beds. A very fine Nurses' Home was recently added to the institution, with accommodation for over seventy nurses. A new and thoroughly equipped dispensary and out-patient department has been completed and opened to patients. There is accommodation for twelve resident pupils—four medical, six surgical, and two in the special departments, each of whom is supplied with a separate room. All information with regard to these appointments can be had from the Resident Medical Officer at the hospital. Licensing bodies recognise six months' residence as equivalent to a year's ordinary attendance at hospital. The manufactories and railway works in the neighbourhood supply this hospital with large numbers of accidents and other cases, while a special ward for venereal diseases affords exceptional opportunities for the study of this important subject.

**JERVIS STREET HOSPITAL** is one of the oldest established in Dublin. The new hospital was completed in 1896, since which time it has been open for the reception of patients. In addition to large medical and surgical dispensaries, the out-patient department includes special departments for the treatment of diseases of the skin, eye, ear, and throat, and diseases peculiar to women. Two resident surgeons are appointed annually. Clinical clerks and surgeons' dressers are selected from among the most attentive of the advanced students without the payment of any additional fee. Twelve interns are appointed annually, and are provided with apartments, &c., free of expense. Special certificates are given to resident pupils and dressers who have performed their respective duties to the satisfaction of the physicians and surgeons.

Students of Jervis Street Hospital are entitled to attend free of charge the Children's Hospital, Temple Street, which contains 100 beds, where special lectures are given on Diseases of Infancy and Childhood, and on Orthopædic Surgery and appliances, and to obtain special courses in fevers at Cork Street Fever Hospital.

**X-Ray and Finsen Light Department.**—Demonstrations in this important branch will be given three times weekly by Dr. Henry Mason and the Students of the Hospital.

## SPECIAL HOSPITALS.

The special hospitals of Dublin are the Rotunda, the Coombe, and the National Lying-in-Hospitals, Cork Street Fever Hospital, the Royal Victoria Eye and Ear Hospital (amalgamation of St. Mark's Ophthalmic Hospital and the National Eye and Ear Hospital), the Dental Hospital, the Orthopædic Hospital, and the Children's Hospitals in Harcourt Street and in Temple Street.

**THE ROTUNDA HOSPITAL.**—This institution is the largest, the longest established gynæcological as well as maternity hospital in the British Empire. The work performed by it is about three times greater than that of any other hospital of its kind in Ireland. The number of patients admitted to the hospital, and also attended in the extern maternity has increased enormously within recent years. The routine daily work comprises the attendance of lectures on midwifery and gynæcology; practice in abdominal palpation; personal conduction of parturition both in the extern and the intern maternities; cystoscopic examinations, as well as attendance at the operation work of the hospital. The hospital affords exceptional advantages to qualified men who take out a three months' course during the autumn, winter, and spring months, for they (if considered competent) are permitted a certain amount of practical operation work, viz.—forceps, curettings, perineorrhaphy, &c. A special afternoon class in gynæcology is held by the Senior Assistant, and one in special pathology by the Pathologist. Fee for each, £2 2s. per month. The Pathological laboratory under the direction of Dr. Rowlette has become an important feature of the hospital. Students can enter at any time for periods of one month or longer. Certificates of attendance are accepted by all the licensing bodies. The L.M. certificate is obtained by attendance at the hospital for six months, with the subsequent passing of an examination. A special certificate in gynæcology is presented to students whose work meets with the Master's approval. Paid clinical assistants are selected (from amongst those who have obtained the hospital L.M. certificate), for periods of six months. The residents' quarters have undergone complete renovation and now afford comfortable accommodation. Women students can also reside in the house under conditions similar to men. The grounds of the hospital contain asphalt and grass courts for lawn tennis and croquet. There is also a full-size billiard table.

**Fees for Pupils.**—Intern 1.—One month, £6 6s.; two months, £9 9s.; three months, £12 12s.; six months, £21; single months other than the first, £4 4s.; board and lodging in the house per week, £1 5s. Night students (not resident in house), £6 6s. for first three months; £4 4s. for the second three months. For further particulars apply to Dr. E. Hastings Tweedy, Master, Rotunda Hospital, Dublin.

**COOMBE LYING-IN HOSPITAL.**—This hospital, which devotes itself to the care of lying-in women, and to the treatment of diseases peculiar to women, was founded in 1826. The original hospital was removed, and the present maternity hospital erected in 1875. An up-to-date labour theatre and waiting ward were added in 1904. The new Gynæcological Hospital was finished in 1903. It contains two modern operating theatres. The former Gynæcological Hospital has been converted into sleeping rooms for resident pupils. The hospital is situated centrally in a most densely populated district. In addition to a very large gynæcological practice, over 2,000 women are delivered annually. The Master visits the maternity wards daily with the students at 9.30 a.m. This is followed by a lecture on midwifery. At 11 a.m. the gynæcological wards are visited; following this a lecture on gynæcology, physical examinations, and operations take place in the theatres. At 4 p.m. on Mondays, Wednesdays, and Fridays, the Master conducts the gynæcological out-patient dispensary. This dispensary affords students exceptional advantages of acquiring a thorough knowledge of gynæcologi-

cal diagnosis. At 5 p.m. on Tuesdays and Thursdays, the Master conducts a special class in practical obstetrics, including palpation, auscultation, pelvimetry, and operations on the phantom. Lady medical students can reside in the hospital. Extern assistants are appointed from among the students as vacancies occur. These most responsible appointments afford the students every opportunity of making themselves competent in practical midwifery. Candidates for the diploma of the Coombe Hospital shall have their names on the books of the hospital for six months, during which time they shall attend as frequently as possible, and be present at 30 deliveries. They shall then present themselves for examination, and if found qualified will receive the diploma. The catering for the residents is in the hands of a competent house-keeper. Board and lodgings, £1 per week. The students' quarters are comfortably furnished.

**Fees.**—Extern pupils (for full course of six months), £8 8s. This includes one month's residence in hospital. Intern pupils—one month, £4 4s.; each consecutive month, £3 3s.; six months and L.M. diploma, £18 18s. Board and lodging in the hospital, 18s. per week. Lady students, intern—one month, £5 5s.; each consecutive month, £4 4s.; six months and L.M. diploma, £18 18s. Registration fee, 10s. 6d. There is no extra charge for attendance at any of the dispensaries. Certificates of attendance from this hospital are accepted by all the licensing bodies.

**\* NATIONAL MATERNITY HOSPITAL.**—This institution, under the mastership of Dr. A. Horne, is situated in Holles Street.

**CORK STREET FEVER HOSPITAL,** 266 beds, is the only special fever hospital in Dublin. It is supported mainly by subscriptions, an annual Government grant, and capitation grants for patients. Regular clinical instruction is given during the winter and summer sessions to those who desire a special course in fevers. There are also courses for the Diploma in Public Health. All particulars may be obtained on application to the Medical Superintendent.

**THE NATIONAL CHILDREN'S HOSPITAL** for the treatment of all non-infectious diseases peculiar to children, with which the Pitt Street Children's Hospital, founded in 1821, was amalgamated, contains 42 beds for the reception of cases of deformity and all other forms of surgical disease. There is a large general dispensary for extern patients held daily from 10 to 11. Operations are performed on Saturday at 12 o'clock. Practitioners and students can attend on application to Sir Lambert H. Ormsby, F.R.C.S.I.

**\* THE CHILDREN'S HOSPITAL,** Temple Street, Dublin (under the care of the Sisters of Charity).—This institution is the largest children's hospital in Ireland. There are 100 beds available for patients; about 1,000 cases are admitted to the wards annually; and about 7,000 or 8,000 seen in the dispensary. During the last year a new operating theatre has been opened. It is fitted and furnished in the best possible fashion for present-day surgery. Special attention is given to orthopædic surgery, and the number of deformities from all parts of Ireland treated and cured in the hospital is rapidly increasing. A special masseuse has been appointed to the hospital to aid in this department.

The hospital is recognised for clinical instruction in the diseases of children by the R.U.I. and licensing bodies, which require a certificate of instruction in this important branch of medical education. A nursing home is in connection with the institution, and trained nurses are always available for private cases. Senior students or others requiring a post-graduate course at the hospital should apply for full particulars to Dr. M. C. Staunton, hon. sec., or to any member of the staff.

**THE INCORPORATED ORTHOPÆDIC HOSPITAL, IRELAND.**—This hospital was founded in 1876, and contains 80 beds. It is available for every class of deformity available for treatment. Particulars may be obtained from Captain Borthistle, secretary, at the hospital.

**THE ROYAL VICTORIA EYE AND EAR HOSPITAL,** Adelaide Road.—This hospital, which was opened

in March, 1904, is an amalgamation of St. Mark's Ophthalmic Hospital and the National Eye and Ear Infirmary. The hospital contains 80 beds. Clinical instruction in diseases of the eye and ear, including the use of the ophthalmoscope and operations, is given daily from 10 till 1. Special classes for practical instruction in the use of ophthalmoscope, &c., and for the demonstration of cases, are formed from time to time.

**THE INCORPORATED DENTAL HOSPITAL**, Lincoln Place.—This hospital, recently erected, is the only special Dental Hospital in Dublin. It is officered by a very strong staff of the leading dental surgeons of Dublin, and has a large *clientèle* and extensive practice among the Dublin poor. The fees are £15 15s. for the first year's study, and £15 15s. for second, and proportionately smaller fees for shorter periods.

#### BELFAST HOSPITALS.

**HOSPITAL FOR SICK CHILDREN**, Queen Street.—This institution, erected by voluntary donations, and supported by voluntary contributions, was opened for the reception of patients on April 24th, 1879. The hospital consists of a medical ward with twenty-eight beds, and one of a similar size for surgical cases. It is strictly non-sectarian in its principles, and is open to all denominations. Children from birth to the age of 12 years, and not suffering from contagious disease, are admissible as in-patients. A very large extern is conducted in the out-patient department between the hours of 9 and 10 a.m., where children from birth to 14 years are attended to. During the winter session systematic courses of lectures and demonstrations in the medical and surgical diseases of infancy and childhood are delivered in the wards on Wednesday and Saturday of each week at 9 a.m. At the close of the session an examination is held, and a gold medal awarded if sufficient merit has been shown.

\***MATER INFIRMORUM HOSPITAL**.—Established 1883. 160 beds. The New Mater Hospital, which was erected at a cost of over £50,000, was formally opened on April 23rd, 1900. During the year the intern patients numbered 1,525; accidents, 3,762, and cases treated in the Dispensary, 22,597; 389 surgical operations were performed with the most satisfactory results. The total number of patients who received treatment was 27,884, being an increase of 1,517 as compared with the year 1904. A notable feature is in the number of accident cases, as the hospital is conveniently situated in proximity to a large working-class population, and within easy reach of most of the public works.

**THE BELFAST MATERNITY HOSPITAL (INCORPORATED)**.—Established 1794. 30 beds.—The practice of the Maternity Hospital, the certificate of which is recognised by all the Universities and Colleges, &c., &c., is open to students. The fee for the session is £2 2s. Resident nurses are also received for training for a period of six months, and a diploma given which is recognised by public bodies. The hospital course is also recognised by the Central Midwives Board. Conditions for such on application to the Matron. During the year 1908, 488 patients were treated in the hospital, and 416 patients at their own homes. Besides this, 185 patients were dealt with in the extern gynaecological department. Clinical lectures and bedside demonstrations are given by members of the staff during both the winter and summer sessions. Students wishing to attend should apply to Dr. H. D. Osborne, 32 Lonsdale Terrace, Belfast, Hon. Secretary to Medical Staff, on or before November 1st and May 1st.

*Note.*—Hospital was rebuilt in 1904 and removed to splendidly equipped new premises in Townsend Street. A Resident Surgeon elected periodically.

**OPHTHALMIC INSTITUTION AND EYE AND EAR HOSPITAL**, Great Victoria Street, Belfast.—Established 1844. New hospital erected, 1867. Operation theatre added, 1902. New extern department, 1909. This hospital is situated on the main road between Queen's College and the Royal Victoria Hospital. It contains about 30 beds for intern patients, and a large extern department. The latter is open on Monday,

Wednesday and Friday at 12 o'clock for eye cases, and on Monday and Thursday at 12 o'clock for ear cases. Special courses of instruction are given during the winter and summer sessions, but students can enter at any time, and can always obtain plenty of practice in ophthalmoscopic work. Full particulars may be had from Dr. Cecil Shaw, 29 University Square East, Belfast.

**ROYAL VICTORIA HOSPITAL**.—Established 1791; incorporated by Royal Charter, 1875 and 1898. New hospital opened, September 17th, 1903. 300 beds; Convalescent hospital, 24 beds; Children's Hospital, 33 beds; Consumptive Hospital, 10 beds.

**ULSTER EYE, EAR, AND THROAT HOSPITAL**.—Established 1871. New hospital opened 1874. 30 beds.

**ULSTER HOSPITAL FOR CHILDREN AND WOMEN**, Mountpottinger, Belfast, is the only hospital in the large part of the city situated on the County Down side of the river. It is placed in a working class district, and has a great field for its charitable operations. There are in the hospital about twenty-two beds for children and eight for women. There is an extern department for children open every week-day, except Saturday, from 9 till 10, and for women at 10.30, and a special department for diseases of the eye, ear, and throat on Tuesdays and Fridays from 9 till 10. During the summer and winter sessions, clinical instruction is given to students daily, operations being chiefly performed on Wednesday and Thursday. There is a resident midwife for extern work, and every facility is afforded students for attending their cases in the district.

#### CORK HOSPITALS.

**VICTORIA HOSPITAL FOR WOMEN AND CHILDREN**.—Established 1874. 70 beds. A large amount of work is done in this hospital to relieve the poor of Cork, Kerry, and other counties. A large number of successful operations are done every year. The hospital contains several private rooms for paying patients.

\***COUNTY AND CITY OF CORK LYING-IN HOSPITAL**.—Established 1798. 17 beds.

\***EYE, EAR, AND THROAT HOSPITAL**, Western Road.—Incorporated 1898. 35 beds. In-patients treated during year, 454; out-patients, 4,238. Clinical instruction is given during college session. Special demonstrations in the use of the ophthalmoscope, laryngoscope, &c., are given from time to time.

\***FEVER HOSPITAL AND HOUSE OF RECOVERY**.—Established 1801. 110 beds.

\***MATERNITY**.—Established 1872.

\***MERCY HOSPITAL**.—Established 1857. 80 beds.

\***NORTH CHARITABLE INFIRMARY**.—Established 1774. 110 beds. Special wards for treatment of diseases of women and children. The extern department is largely made use of, and the number of accidents treated is very large. Clinical instruction is given daily from 9.30 a.m. to 12 noon. A new and thoroughly up-to-date operating theatre has recently been added at considerable expense.

**CORK SOUTH INFIRMARY AND COUNTY HOSPITAL**.—Founded 1773. The hospital contains 100 beds, available for clinical instruction, 40 medical and 60 surgical. There are also special wards devoted to the treatment of diseases peculiar to women and children, and a large medical and surgical extern department.

Clinical instruction is given daily during the session from 9.30 to 11.30, in both the medical and surgical wards, and clinical lectures are regularly delivered.

The operation and sterilising rooms are thoroughly up to date. The X-ray department is fully equipped with the newest apparatus necessary for such work. Students are regularly instructed in the methods of using the rays by practical demonstration on the cases requiring their use.

The hospital has been largely availed of by students of the Cork School of Medicine.

#### GALWAY HOSPITALS.

\***COUNTY GALWAY**.—Established 1786. 60 beds.

\*No answer to our request for information received from these hospitals.

## IRISH PUBLIC SERVICES.

## THE POOR-LAW MEDICAL SERVICE.

For several years past the unsatisfactory nature of the Irish Poor-law Medical Service, as a career for young practitioners, has furnished a theme for the opening addresses at the leading medical schools. In addition to the petty annoyances, the laborious and harassing duties, and the ever-increasing amount of clerical work which the new orders of the Local Government Board impose from time to time, the unfortunate medical officers are grievously underpaid, their salaries being totally out of proportion to the duties discharged, and in the majority of rural districts barely sufficient to cover the out-of-pocket expenses, such as are incurred in the keep of a horse and man, and other servants. The Local Government Board have recently laid it down, moreover, that the dispensary patients have the first call on the time of the medical officer, and that, even if he is engaged on an urgent private case, he must give it up and go off to attend on a "scarlet-runner," as the dispensary visiting tickets are not inappropriately called. So strictly is he bound to the discharge of his duties that unless incapacitated by sickness or other cause, or with the permission of the guardians expressly granted, he cannot leave his district for a single day, even if he makes provision for the performance of his duties in his absence by a brother practitioner. The Irish Medical Association, whose work includes the safeguarding of the interests and the improvement of the condition of the Poor-law medical officer, considers it an imperative duty to point out to young practitioners the following facts: (1) That the Poor-law Medical Service is one in which there is no promotion. (2) That it is a service where few facilities exist for original research, and still less for further medical culture, especially in the rural districts. (3) That, while medical education has become wider in its requirements, and more costly and difficult to procure, almost the same rate of payment given to less educated men forty years ago is still offered, and this, too, at a time when the rural prosperity of the country is less, and consequently lucrative private practice more difficult to obtain. (4) That there is no compulsory superannuation, and, as a consequence, many old and infirm men are forced to remain in the service long after they have become unfit to discharge the duties, seeing nothing but extreme poverty and perhaps the workhouse itself staring them in the face.

We need go no further than to say that the Irish Poor-law Medical Service is a service to avoid. We therefore strongly urge on young medical men the importance of supporting the interest of the profession and their own, by refraining from applying for vacant posts of which the salary is insufficient, from accepting posts as *locum tenens* at a lower rate than £4 4s. per week.

There are 159 workhouse and about 810 dispensary medical officers, besides apothecaries. The salary in this service used to average about £114, and when it is taken into consideration that in the vast majority of rural districts it is necessary to keep one or more horses, the average area being from forty to sixty square miles, it is plain that there will not be a large margin left from the public emoluments.

The dispensary medical officer is also *ipso facto* the registrar of births, marriages, and deaths, and medical officer of health for the district, under the Public Health Act, passed in 1873 and amended in 1878. The former office, in country districts, yields between £5 and £10 a year, and the emoluments of the latter appointment in very few cases reach £20, averaging about £12. The medical officer is also vaccinator for the locality, and is required to vaccinate everyone who wishes to come. For each patient a fee of 2s. is paid, along with his salary, by the guardians, and the sum total of those fees varies, according to the populousness of the district, from £4 to £100, an average for the provinces being about £10.

**Qualifications.**—The qualifications required by the Local Government Board are a licence in surgery, in medicine, and in midwifery; but registration in the

"Medical Register," if effected since the passing of the Medical Act, in 1886, fulfils all requirements. The candidate must also be 23 years of age. Candidates recently qualified must possess a certificate of competence in vaccination.

**Duties.**—The duty of the dispensary doctor is twofold. He has to attend his dispensary on a given day or days in the week. Frequently there are two dispensaries in the district, separated from each other by several miles, and he will have, perhaps, to attend two days a week. He has also to visit at any hour of the day or night a sick person for whose relief a visiting ticket has been issued by a guardian, warden, or the relieving officer, and to continue his attendance as often as may be necessary to the termination of the case. Moreover, he has a great many registry books to keep and a multitude of returns to make, and in most districts he has to make up all the medicines for the poor.

**Workhouse Hospitals.**—The number of unions in Ireland is 150, to each of which is attached one or more medical officers, appointed and controlled by the board of guardians in the same manner as the dispensary medical officer. The salary is about the same as that of the dispensary doctor, and the duties of a more easy and satisfactory description, inasmuch as they are confined to daily attendance at the workhouse hospitals, and no night visits out of doors or long journeys across the country are involved.

## THE IRISH LUNACY SERVICE.

This service, at present, affords a comfortable livelihood for 22 Resident Medical Superintendents and 32 Assistants. The Superintendents receive salaries and allowances ranging, according to the number of inmates of the asylum, from £500 to £1,000 a year, and the Assistants receive salaries and emoluments averaging about £200 a year. There are also a few Visiting Physicians receiving about £120 a year, but this class of officer is being allowed to die out, and no new appointments will be made. The Superintendents and Assistants must devote their whole time to their duties.

Formerly the appointments of Medical Superintendents were in the patronage of the Lord Lieutenant, but, under the Local Government Act, they are in the hands of the County Councils, with the proviso that no one shall be appointed who is not a fully registered practitioner with five years' service as Assistant. The Assistant is appointed by the Committee of the County Council to which the management of the asylum is entrusted. In addition to these officers, there are, in certain larger asylums, Clinical Residents, who receive about £50 a year and full allowances. These appointments afford excellent introduction to the higher places in the service.

## OTHER APPOINTMENTS.

There are, in addition to those which we have mentioned, certain appointments open to medical practitioners in special localities. They are:—

- (1) Attendance on the Royal Irish Constabulary.
- (2) Attendance on the Coastguards.
- (3) Factory Surgeoncies.
- (4) Attendance upon the depot soldiers who are not otherwise provided for.
- (5) Attendance on Postal Officials.
- (6) Prison Surgeoncies.

The Constabulary are paid for at the rate of 2s. per month for each member of the force on duty in the district, including the wives and children of the men, but not of the officers. This includes the supply of medicines. The appointment to this position rests with the Inspector-General of the Royal Irish Constabulary, who usually acts upon the advice of the local District Inspectors as to the convenience of the men, and, of course, the emoluments depend on the number of Constabulary stations and the number of men in each.

**The Coastguard Service.**—The duty of the Medical Officer is to attend the men when sick and to examine candidates either for admission or for superannuation. The fees vary from 5s. to 2s. 6d. per visit. The appointments rest with the Admiralty, but are usually secured for the local Poor-law Medical Officer. The emoluments depend on the number of stations and men.

Factory surgeoncies are in the gift of the Chief Inspector of Factories in Whitehall. There is a set

scale of payment by the factory owner to the inspector for this work, but we believe it is not adhered to, and, in some districts, at all events, the emolument is a matter of arrangement. The amount depends upon the size of the factory, the position being, in Dublin or Belfast, or in other large manufacturing centres, a lucrative one, but in other places scarcely worth taking. The attendance on the military depôts is not worth mentioning. Attendance upon postal servants is badly paid, except in the large towns, and the inspecting and sanitary duties are onerous.

Surgeons to the prisons are appointed by the Lord Lieutenant. The salaries for visiting surgeons vary from about £40 a year to £150. In the larger prisons there are whole-time surgeons.

For further particulars see advertisements:—

Royal College of Physicians...	54	St. Vincent's ... ..	52
University of Dublin ...	49	Richmond, Whitworth and	
Royal College of Science for		Hardwicke ... ..	47
Ireland ... ..	49	Meath ... ..	58
Royal College of Surgeons ...	54	Adelaide ... ..	54
University College, Cork ...	43	Jervis Street ... ..	51
University College, Galway...	47		
University of Belfast...	53	<i>Special Hospitals:</i>	
Catholic University ... ..	49	Rotunda, Lying-in ... ..	58
		Royal Victoria Eye and Ear	51
<i>General Hospitals:</i>		National Children's ... ..	47
Royal City of Dublin ... ..	50	Incorporated Dental ... ..	55
Sir Patrick Dun's ... ..	45	St. Vincent's Asylum for the	
Mater Misericordiae ... ..	44	Treatment of Mental Diseases	47

## Scotland.

NOTWITHSTANDING the increased competition which the recent vigorous growth of the great English provincial medical schools, added to the unsurpassed attractions of the historic Metropolitan hospitals, with their staffs of renowned teachers, offer, the Scottish medical schools seem fully to retain their popularity not only, as is natural, among Scotsmen and their colonial descendants, but among medical students from England, Wales, and Ireland, and, indeed, all parts of our Empire. Of the four universities, Edinburgh, of course, occupies the premier position as a medical school, but at Glasgow, Aberdeen, and St. Andrews, an almost equally good—indeed, in individual details, better—training can be obtained. Two ordinary qualifications to practise are granted in Scotland—the M.B., Ch.B. of the Universities, and the triple qualification of the Colleges of Physicians and Surgeons of Edinburgh and the Faculty of Physicians and Surgeons of Glasgow. The examinations for the University degree naturally are more exacting than those for the triple qualification, and the curriculum wider. Nevertheless, the standard for the latter is much higher than formerly, though on account of the large number of examiners in most subjects it is probably slightly less uniform than that of the universities, where the examinations are conducted by the professors with one or more extra-mural assessors in each subject. Two features of the Scottish system deserve mention—first, as regards the co-ordination of various separate teaching bodies in each centre; second, as regards the conditions under which the students live. Around each university there has grown up an extra-mural medical school, in which the teachers are hospital physicians, surgeons, and specialists unconnected with the university, but whose classes qualify for graduation. Thus the student has usually ample choice, and can, within certain limits, attend the teacher from whom he thinks he will derive most benefit, while the extra-mural lecturers, being unendowed and constantly recruited by fresh blood, have a permanent incentive to keep their courses up to the mark, since any slackness is at once followed by a diminution in the number of students' fees. In late years instead of each extra-mural teacher lecturing separately, combinations have been formed, in which different parts of a course on medicine are given by different physicians, and these have proved exceedingly popular and successful. A very important part of the student's clinical work, too, is done at institutions and under teachers quite unconnected with the universities; this is his dispensary

practice, which may be taken at one of several dispensaries situated in the poorer districts of the towns. Owing to lack of material practical training in obstetrics is one of the least satisfactory parts of the teaching in Edinburgh, and many students are in the habit of going to Glasgow or Dublin for their maternity work. Recently, however, steps have been taken which should render this unnecessary, and ought to give Edinburgh students quite sufficient opportunity of acquiring as good a practical acquaintance with this most important subject as they have of obtaining a theoretical knowledge of it. From what has been said it will be seen that university undergraduates and triple qualification men rub shoulders at every turn—in the wards, dispensary, and lecture-room. University students have the privilege of studying under both intra- and extra-mural teachers, while men going up for the triple qualification are limited to the latter. It is not uncommon, therefore, for a man to come up intending to take the licence, and to change his mind and go in for a degree, or *vice versa*; and this can usually be done without much added expense or taking out many fresh classes, provided the change is not made too late in the curriculum. The weak spot in the Edinburgh curriculum is the overcrowding of subjects in certain years, but the new three-term session, with the increased frequency of professional examinations, which came into operation on October, 1907, has done something to remedy this, and paves the way for a better arrangement of the curriculum.

For the rest, the student lives as he likes and where he likes; the authorities only demand that he shall attend classes with due regularity and diligence, and exhibit sufficient proficiency to pass his examinations. Most men live in lodgings, a few board with private families, and some live in the various halls of residence which have been established. In these last, too, the student is his own master, the halls being managed solely by a committee of the residents for the time being. It is impossible to make any very definite statement as to the relative cost of a medical education in the different schools, as compared with London and Dublin, as so much depends on the extra classes taken out, the mode of living, and so on. The minimum inclusive fees for the licence are £120, for the M.B. degree about £145; but almost every student finds it practically necessary to attend additional classes. On the whole, the cost of living is highest in Edinburgh, lowest in Aberdeen; in the former, while the rent of lodgings is lower than in London, maintenance, including clothing and provisions, is somewhat more expensive. Incidental expenses, amusements, &c., are, however, considerably less in the Northern capital. In Aberdeen, money goes much further than in the south, and the student ought to keep himself on about two-thirds of the funds required in Edinburgh.

### THE CARNEGIE TRUST.

Through the munificence of Mr. Andrew Carnegie, LL.D., payment is now made "of the whole or part of the ordinary class fees exigible by the Universities from students of Scottish birth or extraction, and of sixteen years of age or upwards, or scholars who have given two years' attendance, after the age of fourteen years, at State-aided schools in Scotland, or at such other schools and institutions in Scotland as are under the inspection of the Scottish Education Department."

The Trust provides for the payment of the class fees of the above students proceeding to graduation in medicine or science. Application for payment of class fees under the conditions of the Trust should be made to the Secretary, Mr. W. S. McCormick, Merchants' Hall, Edinburgh.

### UNIVERSITY OF EDINBURGH.

Four degrees in medicine are granted; Bachelor of Medicine (M.B.), Bachelor of Surgery (Ch.B.), Doctor of Medicine (M.D.), and Master of Surgery (Ch.M.). The first two must be taken together, the last two may be taken separately.

No one is admitted to the degrees of Bachelor of Medicine and Bachelor of Surgery who has not

been engaged in medical study for five years, after passing a preliminary examination in general knowledge in accordance with the medical ordinances. A degree in Arts or Science of a British or other recognised University is held to supersede such preliminary examination. The subjects included in this general examination are English, Latin, elementary mathematics, and Greek, or French, or German.

The *annus medicus* of each year is constituted by at least two courses of not less than one hundred lectures each, or by one of such courses, and two courses of not less than fifty lectures each, exclusive of the clinical courses. Two years of the five must be spent at the University, the remaining three years at any other Medical School recognised by the University Court.

During the first four years the student must attend botany, zoology, physics, practical chemistry, practical physiology, practical pathology, and medical jurisprudence during courses of not less than 2½ months each; public health, not less than forty lectures; practical anatomy, during two courses of not less than five months each; chemistry, anatomy, physiology, pathology, surgery, materia medica, medicine and midwifery during courses of not less than five months each. He must attend a course of twenty-five lectures on practical pharmacy, or have dispensed drugs for a period of three months in a recognised hospital or dispensary. He must attend a nine months' course in clinical medicine and in clinical surgery. During the fifth or final year he must be engaged in clinical study for at least nine months. In all, before graduation, he must have done hospital work for at least three years, and have acted as clerk in the medical and surgical wards and attended for six months the practice of a dispensary, or of a physician and surgeon. He must also have studied (1) operative surgery; (2) mental diseases; (3) *post-mortems*, fevers, and diseases of the eye, and (4) one of the following: Diseases of children, of the ear, nose and throat, or of the skin; (5) vaccination; (6) practical anaesthetics.

He must attend at least 25 cases of labour under the superintendence of a registered medical practitioner or 12 such cases, and, for at least three months, the practice of a midwifery hospital.

Each candidate is examined both in writing and *viva voce*—

1. On zoology, botany, physics and chemistry.
2. On anatomy and physiology.
3. On pathology, and materia medica and therapeutics.
4. On medicine, surgery, midwifery, forensic medicine, and public health.

On October 1st, 1907, a new division of the medical curriculum was inaugurated, the year being divided into three sessions, a 1st winter, a 2nd winter, and a summer session. At the end of each of these professional examinations are held, instead of twice yearly as formerly.

The new order of examination (for students beginning in winter) is as follows:—Physics, end of first half of first winter; Chemistry, end of second half of first winter; Zoology and botany, end of first summer; Physiology, end of second summer; Anatomy, end of first half of third winter; Practical materia medica, end of second half of third winter; Pathology, end of third summer; Materia medica, end of second half of fourth winter; Medical jurisprudence and public health, end of fourth summer; Midwifery, end of first half of second winter; Medicine and surgery, end of second half of second winter; Clinical medicine, surgery and gynaecology, end of fifth summer.

The degree of Doctor of Medicine may be conferred on any Bachelor of Medicine and Bachelor of Surgery, and who is of the age of twenty-four years, and who produces a certificate of having been engaged, subsequently to his having received the degrees of M.B. and Ch.B., for one year in attendance on a hospital, or in scientific work bearing directly on his profession, or in the military or naval medical services, or for two years in practice other than purely

surgical. The candidate shall submit to the Faculty of Medicine a thesis on any branch of knowledge comprised in the professional examinations for the degrees of Bachelor of Medicine and Bachelor in Surgery. The candidate will also be examined in clinical medicine and must show practical acquaintance with advanced methods of diagnosis; he may take gynaecology, mental diseases, or diseases of children for one of his three cases. The degree of M.D. is conferred on holders of the degrees of M.B., Ch.B. (Old Regulations) on the submission of a thesis approved by the Medical Faculty, provided that the candidate has passed the preliminary examination in the subjects of Greek and logic or moral philosophy. Should the candidate elect to do so, he may, however, take the M.D. degree under the new regulations, *i.e.*, substituting an examination in clinical medicine for that in Greek and logic. This course is usually pursued by those who did not pass in these subjects with the rest of their preliminary examinations.

The regulations for the degree of Ch.M. are very similar.

**Fees**:—The fee to be paid for the degrees of Bachelor of Medicine and Bachelor of Surgery is twenty-two guineas. The fee for the degree of Doctor of Medicine or of Master of Surgery is ten guineas (Old Regulations, £5 5s.).

The total expense of the curriculum, including examination and matriculation fee, is £146.

Among scholarships, &c., open for competition during the session 1909-10 are the following:—Vans Dunlop scholarship, value £100, in preliminary subjects. Stark scholarship in clinical medicine, value £110; Buchanan scholarship in midwifery, value £40; Mouat scholarship in practice of physic, £57; Syme Surgical Fellowship, £120 for two years; Goodsir Memorial Fellowship, £102 for two years; Freeland Barbour Fellowship, £105. There are also a great many other bursaries, Fellowships and prizes open during the session of 1909-10 and for the details governing entry for these the University Calendar (James Thin, South Bridge, Edinburgh) should be referred to.

Graduation in Public Health: Degrees (B.Sc. & D.Sc.) are also conferred in Public Health. Candidates must be graduates in medicine and must matriculate for the year in which they proceed for examination. They must (1) have worked at least twenty hours a week during a period of eight months in a recognised Public Health laboratory—five of these months must be spent consecutively in the Public Health Laboratory of the University of Edinburgh; and (2) have attended a course of lectures on physics in addition to that qualifying for graduation in medicine, and one on geology.

Candidates for the second examination are not admitted until eighteen months have elapsed after having passed M.B., Ch.B., or sooner than six months after the first examination. They must have attended two courses of Public Health, one dealing with medicine, the other with engineering in relation to public health. They must also have studied practical sanitary work under a Medical Officer of Health for six months, have had three months' instruction in a fever hospital, and three months' instruction in mensuration and drawing.

**Fees for Science Degrees**: B.Sc., first examination, £3 3s.; B.Sc., second examination, £3 3s.

**Diploma of Tropical Medicine**.—Every year an increasing number of candidates avail themselves of the University Diploma of Tropical Medicine and Hygiene, which is conferred only on those possessing a degree in medicine. The course includes practical bacteriology, tropical diseases and hygiene, the zoological character and life history of disease-carrying insects and venomous animals, clinical instruction at an hospital for tropical diseases. The examination is held in January and July, the fee being £4 4s.

**University Hall, Edinburgh**.—In an educational number it is worth while calling attention to the advantages now offered to students coming to Edinburgh to study, in the shape of social residences,



in which students can live in a self-governing community. In each house there are private studies with or without bedrooms, and common sitting and dining rooms. The charges vary from 7s. 6d. to 22s. 6d. per week. The residents elect a treasurer from among their number who acts as intermediary between them and the housekeeper or servants. It is a satisfactory indication of the comfort of the Hall that many graduates live in it and are willing to help or coach the undergraduates for moderate fees. To gain admission two references must be produced from past or present residents, or other suitable person. These are considered and voted on at a house meeting. The Hall is an admirable place for parents to send their sons to. Any unruly member may be expelled by a meeting of the residents similar to that held for elective purposes.

**Medical School for Women.**—Classes for women are carried on in the College of Surgeons and the New School, by Lecturers recognised by the University.

Information may be obtained, on application to the Dean, School of Medicine of the Royal Colleges, College of Surgeons, Edinburgh. Session begins October 1st, 1900. The classes qualify both for the Edinburgh University degree and for the Licence of the Triple Board, and are for women alone. The University of Edinburgh does not recognise certificates presented by female candidates for mixed classes without special cause shown. Women students are eligible for the benefits of the Carnegie Bequest.

#### UNIVERSITY OF GLASGOW.

The University of Glasgow is both a teaching and an examining body, but admits to examination only those candidates whose course conforms to its own regulations. Within certain limits provision is made for accepting instruction given by recognised medical schools and teachers; but eight of the subjects other than clinical must be taken in this or some other recognised University entitled to confer the degree of M.D., and at least two years of the course must be taken in Glasgow University. Under the new regulations, laid down in Ordinance No. 14, Glasgow No. 1, of the Commissioners under the Universities (Scotland) Act, 1889, four degrees, open both to men and to women, are conferred—M.B. and Ch.B. (always conjointly), M.D. and Ch.M. A preliminary examination must be passed in (1) English, (2) Latin, (3) Elementary mathematics, and (4) Greek, French, or German, with possible option to students whose native tongue is not English in the case of the fourth subject, and, on passing, students must register in the books of the General Medical Council. By a regulation recently enacted, it is no longer compulsory to pass in all the four preliminary subjects at once, and they may now be passed at two stages. For M.B. and Ch.B. a curriculum of five years is required. A syllabus with full details of the curriculum and of the preliminary examination may be had, post free, on application to the assistant clerk, Matriculation Office.

The fees for M.B. and Ch.B. are £23 2s.; for M.D. £10 10s., and for Ch.M. £10 10s. For hospital attendance there is an initial fee of £10 10s., with a further fee of £3 3s. for each winter session, and £2 2s. for each summer session, of clinical instruction. There are three very extensive general hospitals in the city, which afford exceptional opportunities for clinical work, while the Royal and other asylums, the City Fever Hospitals, the Maternity Hospital, the Sick Children's Hospital, the Eye Infirmary, &c., give facilities for the study of special branches.

The degrees of B.Sc. and D.Sc. in Public Health and of B.Sc. in Pharmacy, are also now conferred. Of late the University has made considerable efforts to extend its laboratory accommodation and equipment, to augment its teaching staff, and to encourage post-graduate and research work. Within recent years there have been provided new laboratories in the departments of pathology, anatomy (costing £13,000), chemistry, and surgery (costing £9,900); while new laboratories, to cost, with equipment, upwards of £50,000, have been erected

for the departments of physiology, materia medica, and medical jurisprudence and public health.

Bursaries and prizes to the annual amount of about £1,000 are appropriated to medical students, including an Arthur bursary for women, £20 for three years.

Several bursaries open to students in any faculty are not infrequently held by medical students, and Scholarships and Fellowships to the annual amount of £1,600 may be held by medical students who have gone through the Arts course.

**Queen Margaret College for Women.**—Founded in 1883 (by the Glasgow Association for the Higher Education of Women, which was formed in 1877 with the object of bringing University instruction, or its equivalent, within the reach of women), Queen Margaret College in 1890 added to its faculty of Arts a School of Medicine for Women. This was organised entirely on University lines, and with the view of preparing for University degrees; and when, in 1892, in consequence of the Ordinance of the University Commissioners authorising the Scottish Universities to admit women to instruction and graduation, Queen Margaret College became the Women's Department of the University of Glasgow, its classes in medicine taken previously to its incorporation with the University were recognised as preparing for the degree. A full course of study for M.B. and Ch.B. is given by University professors and lecturers, with excellent facilities for hospital and dispensary work in the Royal Infirmary and other hospitals. A Hall of Residence for the students was founded in 1894. Fees for the classes at Queen Margaret College may be paid by the Carnegie Trustees; and several bursaries are open to women students of medicine.

The Winter Session begins on 11th October. The prospectus can be obtained from the Mistress, Miss Melville, Queen Margaret College, Glasgow.

#### UNIVERSITY OF ABERDEEN.

The University of Aberdeen possesses under its charters the amplest privileges claimed or enjoyed by any academical institution. It confers degrees in the five faculties of Arts, Science, Divinity, Law, and Medicine. It also grants diplomas in Public Health, Agriculture, and in Education. It is, moreover, a teaching body equipped with twelve distinct chairs in the various branches of medicine and surgery. The majority of the professors devote their whole time to the work of the chairs. There are fully-equipped laboratories, the accommodation for which has recently undergone considerable extension. The degrees of M.B. and Ch.B. are conferred together; they cannot be obtained separately. The curriculum of study is nearly the same as in the University of Glasgow; the regulations in the preceding columns will therefore apply here. Two years must be passed at Aberdeen. With regard to fees, each candidate for the degrees of M.B. and Ch.B. must pay a fee of £5 5s. in respect of each of the first three professional examinations, and £7 7s. for the final examination. Total cost, exclusive of the fees for degrees, is about £120. Besides the Royal Infirmary, students have the opportunity of attending several other local institutions where special courses of instruction are given. Perpetual fee for hospital practice is only £6. The professional examinations are held twice in each year, namely, in March and July, directly after the close of the winter and summer sessions.

**BURSARIES.**—Bursaries, Scholarships, and Fellowships to the number of fifty, and of the annual value of over £1,180, may be held by students of medicine. (See "University Calendar.")

**THE DEGREE OF M.D.**—The degree of Doctor of Medicine may be conferred on any candidate who has obtained the degrees of M.B. and C.M. (Old Regulations), is of the age of twenty-four years, and has been engaged subsequently to his having received the degree of M.B. for two years in attendance in a hospital, or in military or naval medical service, or in medical or surgical practice, and has presented a thesis which has been approved of by the Medical Faculty. Candidates for the degree of M.D. (New Regulations) are required to pass an examination in clinical medicine in addition

to presenting a thesis. Similar regulations apply to a degree of Ch.M. (Master of Surgery).

A Diploma in Public Health is conferred after examination on graduates in medicine in any University in the United Kingdom. Regulations may be seen in the "Calendar," or obtained on application to the Secretary of the University.

**Aberdeen Royal Infirmary.**—This is a well-equipped institution, containing 250 beds, and affords excellent opportunities for clinical study to students at the Aberdeen University. The city, moreover, offers inducement in the way of cheaper living and comparative quiet to that obtained in Edinburgh and Glasgow, and will doubtless be preferred by some on this account.

#### ST. ANDREWS UNIVERSITY.

UNITED COLLEGE, ST. ANDREWS, AND UNIVERSITY COLLEGE, DUNDEE.

This University (session opens October 7th) grants the degrees of M.B., Ch.B., M.D., and Ch.M. The degrees of the University are open to either sex. For the degree of M.B., Ch.B., two of the five years of medical study must be spent in the University of St. Andrews; the remaining three may be spent in any University of the United Kingdom, or in any foreign, Indian, or Colonial University recognised for the purpose by the University Court, or in such medical schools or under such teachers as may be recognised for the purpose by the University Court. The preliminary examination and the professional examinations are of the same character as in the other Scottish Universities. A Diploma in Public Health is also granted by the University of St. Andrews to graduates in medicine of any University in the United Kingdom. Twelve months must elapse between the date of graduating in medicine and entering for the examinations for the diploma. The course of study required consists of (1) a six months' course of practical chemistry, bacteriology, and the pathology of diseases transmissible from animals to man in a laboratory of the University of St. Andrews; (2) six months' work with a medical officer of health; (3) three months' clinical instruction in infectious diseases. Subjects for first examination:—Chemistry, physics, bacteriology, and meteorology. Second examination:—Sanitation, sanitary law, vital statistics, medicine in relation to public health.

*University College, Dundee*, was affiliated and made to form part of the University of St. Andrews on January 15th, 1897, and the whole medical curriculum may be taken at the medical school (accommodated in a large new building) of that College. The United College, St. Andrews, offers classes for the first two years of professional study.

#### BURSARIES AND SCHOLARSHIPS.

**United College, St. Andrews.**—Malcolm bursary, £25 a year, tenable for five years. Fourteen Taylour Thomson bursaries, £30 to £20, five tenable for one year, nine for two, open to women only proceeding to graduate in medicine. Fourteen bursaries open to competition by entrance students may be held by students of medicine.

**University College, Dundee.**—Eleven entrance bursaries of £15, open to women for arts, science, or medicine, tenable for one year. Four £20 and three £15 second year bursaries for men or women in arts, science, or medicine, tenable for one year. Four £20 and two £15 third year bursaries for men or women in arts, science, or medicine, tenable for one year, and two £20 bursaries for fourth and fifth year medical students. Two Educational Trust bursaries of £25, tenable for three years. Applicants must have attended a public or State-aided school in Dundee for at least one year before examination. Bute bursary, annual income from £1,000 (men only).

**Preliminary Examinations.**—The dates of the next two examinations are September 10th, 1909, and March 24th, 1910. Schedules (obtainable from the Secretary of the University) to be returned filled up, and fees paid by September 1st, 1909, or March 12th, 1910.

**Fees for Degrees.**—Total fees for M.B., Ch.B., are the same as at other Scottish Universities, i.e., 22 guineas (payable in instalments). Fee for the degree of M.D.,

and also for that of Ch.M., is 10 guineas in each case. For the Diploma of Public Health examinations the fee is £5 5s. for each of the two examinations.

**Class Fees.**—The fee payable in each of the following classes is 4 guineas, viz.:—Chemistry, physics, zoology, botany, physiology, anatomy, materia medica, pathology, forensic medicine, and public health, medicine, surgery, and midwifery. The fee for the practical classes in these subjects is 3 guineas each. In clinical surgery, clinical medicine, ophthalmology, diseases of the throat, nose, and ear, diseases of the skin, and mental diseases, the class fees are 2 guineas each. The fee for Public Health chemistry required for the D.P.H. is 7 guineas. A special class in Bacteriology is also held for the D.P.H. for which the fee is 3 guineas.

**Dundee District Asylum.**—The appointments includes two qualified resident assistants and two resident clinical clerks. Clinical instruction is given.

**Dundee Royal Infirmary.**—The Infirmary contains 400 beds, with an annual average number of over 4,000 in-patients, and an annual daily residence of 280, with special wards for maternity cases, diseases of women, diseases of children, diseases of the eye, diseases of the ear, throat and nose, cancer, and for cases requiring electric treatment. Five resident qualified assistants and an outdoor obstetric assistant are appointed annually. Clinical clerks and dressers are attached to the physicians and surgeons, and students are appointed to assist in the post-mortem room. Out-patients are seen daily at 9 a.m. The instruction given at the Infirmary is recognised for purposes of graduation by the Scotch Universities, the University of London, the University of Cambridge, the Royal University of Ireland, and by the Royal Colleges of England and Scotland. Hospital Tickets for the Infirmary, £2 2s. each session, or £3 3s. a year. Perpetual, £10 in one payment, or £10 10s. by instalments.

Further information will be found in the Calendar of the university published by Messrs. Blackwood and Sons, Edinburgh, the "Calendar of University College," Dundee (obtainable from the Secretary), or can be had from the Dean of the Medical Faculty, Professor I. A. Kynoch. (See advertisement page.)

#### THE COLLEGES.

The Royal College of Physicians of Edinburgh, the Royal College of Surgeons of Edinburgh, and the Faculty of Physicians and Surgeons of Glasgow have arrangements by which the student may obtain the diploma of the co-operating bodies, and can register three diplomas under the Medical Acts, viz., Licentiate of the Royal College of Physicians of Edinburgh, Licentiate of the Royal College of Surgeons of Edinburgh, and Licentiate of the Faculty of Physicians and Surgeons of Glasgow.

The three bodies grant their *single* qualifications only to candidates who are already registered as possessing another and opposite qualification in medicine and surgery as the case may be.

**REGULATIONS OF THE CONJOINT BOARD OF THE ROYAL COLLEGE OF PHYSICIANS OF EDINBURGH AND THE ROYAL COLLEGE OF SURGEONS OF EDINBURGH AND THE FACULTY OF PHYSICIANS AND SURGEONS, GLASGOW.**—The candidate must produce certificates of having attended the following course of lectures, the certificate distinguishing the sessions and the schools in which the courses were attended. Anatomy, six months; practical anatomy, twelve months; chemistry, six months; practical chemistry, three months; materia medica, three months; physiology, six months; medicine, six months; clinical medicine, nine months; surgery, six months; clinical surgery, nine months; midwifery, three months; medical jurisprudence, three months; pathology, three months. The candidates must also produce the following certificates:—(a) Of having attended six cases of labour under the superintendence of a registered practitioner. (b) Of having attended for three months' instruction in practical pharmacy. The teacher must be a member of the Pharmaceutical Society of Great Britain, or the Superintendent of a laboratory of a public hospital

or dispensary, or a registered practitioner, or a teacher to a class of practical pharmacy. (c) Of having attended for twenty-four months the medical and surgical practice of a hospital, containing eighty patients, and possessing distinct staffs of physicians and surgeons. (d) Of having attended for six months the practice of a public dispensary, or of having assisted for six months a registered practitioner. (e) Of having been instructed in vaccination.

**First Examination, Fee £5.**—The first examination shall embrace chemistry, physics, and elementary biology, and shall take place not sooner than the end of the first year, including a winter and summer session. Candidates who desire to enter for the first professional examination must produce certificates of attendance on chemistry, practical chemistry, anatomy, and six months' practical anatomy.

**Second Examination, Fee £5.**—The second examination embraces anatomy and physiology and shall not take place before the termination of the summer session of the second year of study. Candidates must produce certificates of attendance on anatomy, practical anatomy, and physiology.

**Third Examination, Fee £5.**—Comprises the subjects of pathology, materia medica, and pharmacology and advanced anatomy.

**Final Examination, Fee £15.**—The final examination embraces medicine (including therapeutics and medical anatomy, clinical medicine); surgery (including surgical anatomy and surgical pathology); clinical surgery; midwifery and gynaecology, medical jurisprudence and hygiene; and shall not take place before the termination of the full period of study.

Subjects of Preliminary Education: (1) English grammar and composition; (2) Latin, grammar, translation from specific authors and easy unseen translation; (3) (a) arithmetic, to vulgar and decimal fractions; (b) algebra, to simple equations; (c) geometry, to the first two books of Euclid; (4) elementary mechanics of solids and fluids, comprising the elements of statics, dynamics, and hydrostatics; (5) one of the following:—(a) Greek; (b) French; (c) German; (d) Italian; (e) any other modern language; (f) logic; (g) botany; (h) zoology; (i) elementary chemistry.

**Qualification in Public Health:** The College of Physicians, in association with the Royal College of Surgeons of Edinburgh and the Faculty of Physicians and Surgeons of Glasgow, confers a certificate of competency in public health. The examinations are held in April and October. Fee, £10 10s.

For the special regulations of the Royal College of Surgeons of Edinburgh, intending candidates should apply to Mr. James Robertson, 48 George Square, Edinburgh; and for those of the Royal College of Physicians, to the Secretary.

The Fellowship of the Royal College of Physicians of Edinburgh is conferred only by election, and the candidate must have been a member of the college for at least three years, and have attained the age of twenty-seven years.

The Membership is conferred only on a licentiate of a college of physicians or graduate in medicine of a British or Irish University, provided he shall have attained the age of twenty-four years and shall have passed an examination on: (1) medicine, including therapeutics (2) on one of the following optional subjects, in which a high standard of proficiency is expected:—(a) a department of medicine specially professed; (b) psychological medicine; (c) pathology; (d) medical jurisprudence; (e) public health; (f) midwifery; (g) gynaecology. The examination is of a searching character.

The fee for membership is 35 guineas, for fellowship 38 guineas, with a stamp duty of £25—£101 13s. in all.

The licence, or single qualification in medicine, is conferred on candidates who already possess a recognised qualification in surgery. The examinations for this licence are held on the first Wednesday of each month, save those of September and October, in medicine, materia medica, midwifery, and medical jurisprudence. The fee is £15 15s., and intending candidates should communicate with the Secretary of the College at least eight days before the date of examination.

The Fellowship of the Royal College of Surgeons of Edinburgh is conferred (except under certain conditions as to age and professional standing) only on candidates who have passed a special examination, and have previously obtained a diploma from the college, or from either of the Colleges of Surgeons of England or Ireland, or the Faculty of Physicians and Surgeons of Glasgow, or the surgical degrees of the Universities of Great Britain, and who are twenty-five years of age. The subjects for examination for those who are already Licentiates of the College are on the principles and practice of surgery, clinical and operative surgery, and one optional subject.

Those who are not Licentiates of this College: on principles and practice of surgery, clinical and operative surgery, surgical anatomy, and one optional subject; and in such supplementary subjects as have not, in an adequate manner, been included in the examination for the registrable surgical qualification possessed by such candidates, and which are required in the examination for Licentiates of this College.

The optional subjects shall embrace: (a) Surgery, special branches; (b) advanced anatomy and physiology; (c) surgical pathology and morbid anatomy; (d) midwifery and gynaecological medicine and surgery; (e) medical jurisprudence and hygiene; (f) practice of medicine and therapeutics. The examinations are written, oral, and practical. Three weeks' notice must be given to Mr. James Robertson, from whom full particulars as to certificates required may be obtained. The fee is £30 for those who hold the diploma of Licentiate of the College, and £45 to others (no stamp duty is payable on the diploma). Registered practitioners, aged not less than 40, who have been in practice for not less than ten years, and who have highly distinguished themselves by original investigations, may under special circumstances be elected without examination. Women are not admitted to the Fellowship of either college.

**LICENCE.**—The examination embraces the principles and practice of surgery (including operative surgery and surgical pathology), clinical surgery, and surgical anatomy, and shall not take place before the termination of the full period of study. Fee, £15 15s.

**DENTAL DIPLOMA.**—Every candidate for the dental diploma must have attended the general lectures and courses of instruction required at a University or an established medical or dental school recognised by the College as qualifying for the diploma in surgery. The fee is £10 10s.

**Edinburgh Royal Infirmary.**—Clinical instruction is afforded at this institution, which contains 900 beds under the supervision of professors of the University and the ordinary physicians and surgeons of the Infirmary. Special instruction is given on diseases of women, physical diagnosis, diseases of the skin, eye, ear, throat and teeth, and anaesthetics. Separate wards are devoted to venereal diseases, diseases of women, diseases of the eye, also to cases of incidental delirium or insanity, and three wards are specially set apart for clinical instruction to women students. Post-mortem examinations are conducted in the anatomical theatre by the pathologists. The perpetual fee, on one payment, £12; the annual fee, £6 6s.; half-yearly, £4 4s.; quarterly, £2 2s.; monthly, £1 1s. Separate tickets amounting to £12 12s. entitle the student to a perpetual ticket. No fees are payable for any surgical or medical appointment.

The appointments are as follow:—

1. Resident physicians and surgeons are appointed and live in the house free of charge. There is no salary. The appointment is for six months.

2. Non-resident physicians and surgeons (in the special subjects and for out-patient work) are appointed for six months. These appointments may be renewed.

3. Clerks and dressers are appointed by the surgeons and physicians. These are open to all students and junior physicians holding hospital tickets.

4. Assistants in the pathological department are appointed by the pathologists to conduct post-mortem examinations in the anatomical theatre.

**ROYAL HOSPITAL FOR SICK CHILDREN.**—During the

year three courses of clinical instruction are given by the staff of the hospital, who are recognised as University Lecturers on the subject. The course consists of clinical lectures, ward clinics, attendance at *post mortems* and out-patient clinics. Hospital tickets, £1 1s.

#### SCHOOL OF MEDICINE OF THE ROYAL COLLEGES, EDINBURGH.

The government of this school, established in 1505, is now vested in a board which is equally representative of the two Royal Colleges and the Lecturers, the school being styled "The School of Medicine of the Royal Colleges, Edinburgh." The present number of lecturers is about sixty, of whom the greater number deliver qualifying courses of instruction of the same duration and scope as those delivered within the University, while a large number of non-qualifying courses on special subjects of interest to medical science, but which are not required for graduation, are delivered both in the winter and summer sessions. The students who attend the classes of the School of Medicine are largely students proceeding to the University degree, as well as those who are intending to take other qualifications, such as the triple qualification of the Royal College of Physicians of Edinburgh, the Royal College of Surgeons of Edinburgh, and the Faculty of Physicians and Surgeons of Glasgow; that of the Royal College of Physicians of London, and the Royal College of Surgeons of England, and the degrees of the different Universities. The number of students attending the school averages 1,300 annually. For particulars apply to the Dean of the School, Royal College of Surgeons, Edinburgh.

The minimum cost of the education in the School of Medicine for the triple qualification of physician and surgeon from the Royal Colleges of Physicians and Surgeons of Edinburgh and the Faculty of Physicians and Surgeons of Glasgow, including the fees for the joint examinations, is about £120, which is payable by yearly instalments during the period of study.

The Winter Session opens October 3rd.

#### GLASGOW EXTRA-MURAL SCHOOL.

**St. Mungo's College and Glasgow Royal Infirmary.**—This college was incorporated in 1889 under its new title, being formerly known as the Glasgow Royal Infirmary School of Medicine. The Medical Faculty occupies buildings erected for the purpose of the medical school in the grounds of the hospital, and the laboratories, museums, and lecture rooms are of the most approved description. The college has been recently equipped with a complete electric light installation, and a powerful electric educational lantern. Attendance on the classes in St. Mungo's College qualifies for the medical degrees of the Universities and the medical and surgical colleges in accordance with their regulations.

The Royal Infirmary, which is at the service of the College for teaching purposes, is one of the largest general hospitals in the kingdom. It has over 600 beds available for clinical instruction, including an ophthalmic department, and it has special wards for diseases peculiar to women, for venereal diseases, burns, and diseases of the throat, nose, and ear. At the dispensary special advice and treatment are given in diseases of the eye, ear, teeth, and skin, in addition to the large and varied number of ordinary medical and surgical cases which in a great industrial centre daily require attention. Students at the college and hospital get the benefit of dispensary experience free of charge, and no better or wider field for seeing hospital practice and receiving clinical experience can be found than in the Glasgow Royal Infirmary.

**Appointments.**—All appointments are open. There are five physicians' and eight surgeons' assistants, who obtain free board and residence in the hospital and act in the capacity of house physicians and house surgeons. There is also a house surgeon for the ophthalmic department. These appointments are made for six months, and are open to gentlemen who have a legal qualification in medicine and

surgery. Clerks and dressers are appointed by the visiting physicians and surgeons. From the large number of cases of acute diseases and accidents of varied character received, these appointments are valuable to students. In the pathological department assistants are also appointed by the pathologist.

**Fees.**—The fees for Lectures, including hospital attendance necessary for candidates for the Diplomas of the English, Scotch, and Irish Colleges of Physicians and Surgeons, amount to about £70.

**Royal Infirmary.**—Fees: Hospital practice and clinical instruction, first year, £10 10s.; second year, £10 10s.; afterwards free. Six months, £6 6s.; three months, £4 4s.; pathology, both courses, £4 4s.; vaccination fee, £1 1s.

**Dental Curriculum.**—Students studying with a view to the dental diploma can obtain instruction in the following subjects: Physics, chemistry, anatomy, physiology, surgery, practice of medicine, and materia medica. The special dental courses may be obtained in the Dental School, 15 Dalhousie Street, Glasgow. Particulars may be had from D. M. Alexander, Esq., 97 West Regent Street.

**Anderson's College Medical School, Glasgow.**—The College was founded in the eighteenth century. The modern, excellently equipped buildings are situated in Dumbarton Road, immediately to the west of the entrance to the Western Infirmary, and within four minutes' walk of the University. Extensive laboratory accommodation is provided for practical anatomy, practical chemistry, practical botany, practical zoology, practical physiology, practical pharmacy, operative surgery and public health. Ample provision has also been made for the comfort of students. The buildings are constructed upon the most approved modern principles. The dissecting room is open in winter from 9 a.m. to 6 p.m., and in summer from 6 a.m. to 6 p.m. The students are assisted in their dissections by the professor and demonstrators, by whom daily examinations and demonstrations on the parts dissected are conducted. The supply of subjects is ample, and students are consequently provided with parts as soon as they may be ready for them. The dissecting room is provided with a complete series of dissecting specimens mounted in plaster of Paris illustrating the anatomy of the human body. There is also a large Bone Room, furnished with complete sets of painted and unpainted bones.

The various courses of instruction qualify for all the Licensing Boards in the United Kingdom, and for the Universities of London, Durham, Ireland, Edinburgh, and Glasgow, under certain conditions. The courses in public health (laboratory and lectures) are also recognised by the University of Cambridge. Session opens October 12th, 1908. For syllabus, apply to the Secretary of the Medical Faculty, Anderson's College Medical School, Glasgow, W.

The Carnegie Trust pays the fees of students at Anderson's College on conditions regarding which particulars may be obtained from W. S. McCormick, Esq., LL.D., Carnegie Trust Offices, Edinburgh.

**Class Fees.**—For each course of lectures (anatomy, ophthalmic medicine and surgery, aural surgery, diseases of throat and nose, mental diseases, and public health excepted), first session, £2 2s.; second session (in Anderson's College), £1 1s. For practical classes (except anatomy, chemistry, and public health), namely, botany, zoology, physiology, pharmacy, operative surgery, first session, £2 2s.; second session, £2 2s. **Chemistry.**—Lectures, £2 2s.; practical chemistry, £3 3s. **Botany and Zoology.**—Reduced fees for lectures with laboratory work in botany or in zoology, during same summer session, £3 3s.; for lecture class or practical class separately, in botany or in zoology, £2 2s. **Ophthalmic Medicine and Surgery** (including hospital practice), aural surgery, diseases of throat and nose, and mental diseases, fee for each course, £1 1s. **Anatomy Class Fees.**—Winter.—First session, lectures and practical anatomy, £5 5s.; practical anatomy alone, £2 2s. Second session, lectures and practical anatomy, £5 5s.; practical anatomy alone, £2 2s. Third session, practical anatomy,

£1 1s. Summer.—Lectures and practical anatomy, £2 12s. 6d.; lectures alone, £1 11s. 6d.; practical anatomy alone, £1 11s. 6d.; osteology and practical anatomy, £2 12s. 6d.; osteology alone, £1 11s. 6d.; practical anatomy alone, £1 11s. 6d. *Public Health Laboratory*.—Fee for six months' course, £12 12s. *Matriculation Fee*.—For the year, 10s.; for one class alone in winter, 5s.; for summer session alone, 5s.

**Glasgow Maternity and Women's Hospital.**—This institution is of ancient foundation, but the present buildings, containing 114 beds, with a large out-patient department, were only opened last year. Erected with due regard for the most modern requirements, and staffed by physicians of reputation, it affords excellent facilities for acquiring a complete knowledge of the art and practice of obstetrics. There is also a students' residence in connection with the hospital, in which board and residence can be had at very moderate fees. The hospital fee for three months is £3 3s., and £2 2s. for nine months immediately following.

Glasgow can boast of several other important medical institutions, such as the Western Infirmary, with a staff representative of the best in medicine and surgery of the second city of the Empire, and having no fewer than 500 beds. There is also the Victoria Infirmary, with 260 beds, in which leading specialities, such as ophthalmology, aural surgery, diseases of the throat, diseases of women, diseases of the skin, etc., are taught; the Glasgow Eye Infirmary, with 100 beds; the Royal Hospital for Sick Children, with 74 beds, etc.

(END OF EDUCATIONAL NUMBER.)

## CORRESPONDENCE.

### FROM OUR SPECIAL CORRESPONDENTS ABROAD.

#### FRANCE.

Paris, Sept. 5th, 1909.

#### ECZEMA AND TAR.

THE treatment of certain dermatoses, and of eczema in particular, by the application of crude tar, is strongly recommended by Prof. Broca, of Paris.

Empirics employed this remedy for years, and sailors know that by painting the parts with tar they obtain considerable relief in local pruritus, while in certain parts of Brittany eczematous eruptions are constantly treated by this agent.

As everyone knows, there are two varieties of tar—vegetal tar, resulting from the distillation of wood, turf, etc., and tar from coal, or coal tar; this latter is alone used by Prof. Broca as a topical application for eczema.

Before using the tar, it should be well washed in distilled water to remove all traces of potash and ammonia constantly present, and which would be very irritating to the skin.

According to Leistikow, tar belongs to the class of reducing agents resembling in its effects pyrogallol acid, and, like it, possesses keratoplastic properties. It softens the thick, horny layer, diminishes the formation of squamæ, dries the surface, is a strong astringent for the papillary vessels, and suppresses pruritus by its influence on the terminal nerves.

The method employed by Prof. Broca is as follows: The affected region is first carefully cleaned as far as possible. Where the eczema is moist, covered with crusts or squamæ, a wet compress of some slightly antiseptic solution (boric acid) is applied for 24 or 48 hours, or longer if necessary. An application of zinc or ichthylol ointment might meet the same requirement; in case of pustulæ they are opened and cauterised with a solution of nitrate of silver.

When the surface is by these means well cleaned, a thick layer of coal tar is painted on the whole surface and left to dry. This is one of the important points of the treatment; the longer it is left to dry—one, two, or three hours, as tar dries very slowly—the better the effect of the agent.

When sufficiently dry the parts are powdered with talc and covered with a piece of fine linen. No oil silk should be applied.

Where the skin is not too much inflamed, and the oozing not too great, the dressing may be left two days, and if at the end of that time the aspect of the tegument is satisfactory, and no burning sensation nor itching is complained of, the powder may be continued until all trace of the tar has disappeared, after which, and if necessary, a new application may be made. But if the teguments are very inflamed, and the oozing very abundant, and the patient complains of burning, lancinating pains, or itching, zinc ointment should be applied after the second day of the coating of tar, for four or five days, when the tar may be renewed.

The patient should be warned of the extreme adherence of this substance, and the advantage of allowing it to eliminate spontaneously.

The three great advantages of tar are: it dries the oozing surface, modifies and relieves the redness and tumefaction, and suppresses for a time the itching.

#### TREATMENT OF SYPHILIS (BY PROF. GRANCHER).

Three drugs compose the treatment of syphilis:—

Mercury.

Iodide of potassium.

Sulphur.

*Mercury*.—Soluble solutions should be employed, in virtue of the old adage, *corpora non agunt nisi soluta*. Mercury can be absorbed either by the mouth or by the skin; by the mouth in the form of corrosive sublimate or of a solution of lactate of mercury.

Corrosive sublimate, 1/5th gr.

Ext. of opium, 1/5th gr.

Excipient, q.s.

For one pill; two daily, or, in grave cases, three.

For children, and for adults who cannot swallow pills, a solution of lactate of mercury (1—1,000) should be used. The dose is 10 drops twice or three times a day for children, while adults may take 5 teaspoonsful daily. By the skin, solutions of benzoate or bi-iodide of mercury should be employed, of which different formulæ exist; the latter is the more painful. As these substances are much more rapid in their effects when introduced hypodermically, they should be used in all syphilitic manifestations where it is necessary to act quickly and energetically.

Many advocate grey oil, but, for Prof. Grancher, it is dangerous, as it has provoked more than once gangrene of the mouth, terminating in some cases in death. On the other hand, grey oil is not more efficacious than the other preparations. M. Grancher prefers friction with strong mercurial ointment, done by the patient himself during 20 minutes daily for three weeks.

During the secondary period of the malady, the mercurial treatment should be less intensive, with periods of rest. During the second year the treatment should be prescribed one month out of two, the third year one out of three, and the fourth year one out of six months.

In ordinary average cases of syphilis the treatment should be commenced as soon as the disease is recognised. During the violent period a series of 15 injections of benzoate of mercury should be made, and the pills given at the same time. Then, if no accidents are observed, the patient should be allowed one month's rest. The gravity of syphilis depends on the subject and on the disease itself, and not on the treatment.

*Iodide of potassium* does not possess the value of mercury; it is only an adjuvant. Its indications are found where ulcerous lesions, exostosis, periostitis, or otitis exist. The dose is from 15 to 30 grains a day or more, but a drachm should not be exceeded. It should not be given in ordinary cases of the disease, as it is a drug that might become dangerous by provoking congestion or hæmorrhage, while in affections of the larynx, lungs, or kidneys its action is frequently injurious.

*Sulphur* is employed only as an eliminator of mercury.

## GERMANY.

Berlin, Sept. 5th, 1909.

THE *Deutsche Medizinische Zeitung*, No. 66, contains a notice of a paper on the

## PHAGOCYTARY ACTIVITY OF THE RED BLOOD CORPUSCLES,

by Dr. Sewastianoff, of Kiev.

Red blood corpuscles, he says, are perfect phagocytes, both *in vivo* and *in vitro*. The blood plates of Bizzozero are also phagocytes under some conditions. In all cases of natural or acquired immunity the resistance of the organism is apparently due to the biological properties of the erythrocytes. The hæmoglobin plays the leading rôle in phagocytosis. The erythrocytes are the natural carriers of the complements, the amboceptors, the fibriniferments, the antitoxines, the alexines, agglutinines, precipitines, the opsonines, antigressines, and other ferments. The bactericide and antitoxic properties of serums are dependent on the secretion of bactericide and antitoxic substances from the erythrocytes. As a weapon in the strife against microbes the erythrocyte makes use of electricity and magnetism. The question as to the disappearance of the microbes in the phagocytes is not quite solved by Metchnikoff's theory of intracellular digestion, but in the case of absolute immunity it is a factor in part, it is not the only form. The red blood corpuscle possesses independent movement, and can change its form of itself. With the erythrocytes the hæmoglobin plays the part of the nuclear substance. The red blood corpuscle possesses no covering; the latter is the product of chemical process, or of a condition unfavourable for the erythrocytes. The erythrocyte divides both *in vivo* and *in vitro* directly by budding, whereby the blood plates originate from it, and also indirectly. Electrical properties are as much characteristic of erythrocytes as they are of nerves and bacteria. Erythrocytes under certain conditions are capable of being converted into leucocytes, and in the process pass through several stages until that of the many nucleated leucocyte is reached. The pus corpuscle is undoubtedly a metamorphosed erythrocyte. There is no need for a theory of formation of leucocytes in the spleen; it is a lazarette for injured ones. Lymphocytes are polynuclear leucocytes that have undergone a change in the lymph glands; the mononuclear ones can only arise from fusion of polynuclear ones or from mononuclear erythrocytes. The expressions, leucæmia lienalis, lymphadenica, myelogenes, should no longer be made use of, as the leucocytes arise in the blood, and in the tissues, and blood-forming organs in so far as these are damaged. The notion that in every case of leucocytosis there is some irritation of the blood-forming organs, and that numerous leucocytes are then formed and collect at the wounded spot, has not yet been proved to be correct. The conversion of erythrocytes into leucocytes, and *vice versa*, forms a circle that is closed.

## RESECTION OF THE OVARY, WITH SUBSEQUENT PREGNANCY.

Dr. Zacharias reports a case of the above in the *Zentralbl. f. Gyn.*, 10/09. Resection of the ovary will naturally only be performed, he says, when the tumour which leads to the operation is of a non-malignant character, and, further, when the resection may be of some value later. In the case recorded pregnancy followed about four and a-half years after the operation. In a second case the left ovary was completely extirpated; the right was resected on account of a dermoid tumour. Menstruation ceased a year and nine months after the operation. In a third case death took place from some cardiac affection. In a fourth the left ovary was entirely removed; the right tumour, which was the larger, and which did not permit of any remains of ovarian structure to be recognised, was shelled out, so that only a very small remnant of tissue was left the thickness of a two-shilling piece; after the operation menstruation ceased entirely.

The *Monatssch. f. Augenheilk.*, June, 1909, contains an article on the

## DIFFERENTIAL DIAGNOSIS BETWEEN OCULAR HEADACHE AND THAT CAUSED BY DISEASE OF THE NASAL CAVITIES.

The writer says that 40 per cent. of the cases seeking

advice were referred to eye specialists on account of headache. In many of the cases the pain was set up by inflammatory diseases of the nasal cavities. In these diseases symptoms were present that led the patient to consult a specialist; these were photophobia, pain in the ball of the eye, accommodation pain and swelling of the eyelids, especially in the morning. In 7 per cent. of these cases he had found that the headaches were caused by empyæma of the antrum and other inflammatory diseases of the nasal passages. The following points he considers important from a diagnostic point of view:—When the pain is unilateral and distinctly localised, it points to nasal disease. All headaches that follow influenza are to be suspected; also when they are very violent and have commenced with great suddenness. Periodical headaches that begin soon after getting up in the morning, continue for some hours, and then gradually subside, disappearing entirely during the evening, are explained by accumulations of pus in the nasal sinuses when the head is low, setting up a tormenting headache; these flow away drop by drop during the day. Purulent discharges from the nose, especially when they are unilateral, often cause headaches. When the eye surgeon, therefore, finds that there is no ocular cause for the headaches, he should have the nasal organs examined by an expert in order to be quite certain that the cause of the trouble does not lurk somewhere in them.

## TREATMENT OF DIABETES.

In the *Med. Klinik*, 1905, Nos. 55/6, Dr. Manfred Fraenkel, of Berlin, presents a new theory of the pathogenesis of diabetes based on the idea that normally the transformation of glycogen into sugar is due to a ferment which arises from the decomposition of red blood corpuscles. This ferment is produced more rapidly when there are circulatory disturbances, until a point is reached when the quantity of sugar created no longer can be utilised, super-saturates the blood, and is excreted in the urine.

A condition for normal utilisation of sugar is a normally functioning vaso-motor system, with its centre on the floor of the rhomboid fossa. The trophic factors are of no small importance. A dominating position over the entire vasomotor system of the liver must be ascribed to the vagus. In this connection the relationship between diabetes and tuberculosis is of much interest. Claude Bernard found sugar-forming fibres in the lung fibres of the vagus, so that any injury to the former must also strike the latter. This explains the secondary occurrence of tuberculosis in diabetes.

Fraenkel then points out the possibility of influencing the vagus by means of eserine. He considers the activity and pathology of the pancreas and the pathology of diabetes in general, and emphasises that changes in the pancreas present themselves as interstitial degeneration, especially of Langerhan's cells. These, too, have their cause in the circulatory disturbances. In diabetes all other organs always show signs of extensive hyperæmia. The final link in his chain of reasoning is the significance of arterio-sclerosis. He cites Noorden and Croner in support of the connection between it and diabetes. Arterio-sclerosis is primarily the expression of circulatory disturbances, and, according to the location of the vascular injury, one subject is exempt from diabetes, while another succumbs thereto when the arterio-sclerosis establishes itself in the hepatic vessels.

He therefore combined eserine with the modified salts of Trunczek's serum (anti-sclerosin), the tablets being given the name of "diabeteserine," and used the same with very good results in 22 out of 29 cases.

Diabeteserine is furnished in two forms. No. 1 contains the blood salts, with 0.0004 gm. physostigmine salicylate per tablet. No. 2 contains in addition 0.0005 gm. atropine per tablet. No. 2 is ordered in cases with obstinate constipation, colicky pains, or pronounced obesity, when No. 1 fails to give the desired results. The dosage is one or two tablets thrice daily for from two to four weeks. The diet, of course, must be adapted to the requirements of the individual.



## AUSTRIA.

Vienna, 5 pt. 5th, 1909.

## INTERNATIONAL CONGRESS.

THIS week has witnessed a great exodus to Budapest, where the medical world is congregated to receive the hospitality of the Hungarian nation, where between 5,000 and 6,000 have met to discuss medical topics under the patronage of his apostolic Majesty, and represented by Archduke Joseph. The usual receptions and invitations were accorded to all the members. As might be expected, the Germans and French have sent the largest representation, while the United States and Argentine follow close in the rear. Sonnenberg, of Berlin, promoted an active discussion on the popular disease, appendicitis. He is not in favour of early operation, and declared it was not necessary in every case to operate, particularly those of a catarrhal nature, which could be treated without interference, as he had seen 300 of these acute appendicitis cured without any operation. The Vienna school have invited all the guests of the sister kingdom to visit Vienna before returning home.

## ERYSIPELAS IN THE AGED.

Schlesinger writes a long article in the *Medizinische Klinik* on the treatment of erysipelas, which he contends is induced by myodegeneration of the heart in old age. He is inclined to believe in this cause being present in the young as well, and prefers the use of digitalis to obviate this difficulty. Where bradycardia is present, he prefers caffeine and nitro-salicylic till the blood pressure falls or the arrhythmia is corrected. As a prophylactic he would rub fat into the skin after the active inflammatory condition had subsided, and where it was likely to recur. He also thinks that the affected part should be frequently bandaged to avoid the danger of hypostasis, and bathed with a 60 per cent. solution of alcohol, 10 per cent. of ichthyol or naphthalan ointment. Local applications of warmth with the thermophore often give great relief. This need not be continued for any length of time, as infiltration rapidly takes place. The suffering may often be relieved with an anæsthetic ointment such as a 10 or 20 per cent. of eucainum lacticum ointment.

## "YOGHURTMILCH."

Winkler said this was a preparation of milk prepared by a specific process, and containing three bacilli, the principal one being *Bacillus Bulgaricus*, belonging to the lactic acid bacilli group. In addition to the *Bulgaricus*, there is a *Streptococcus* and the *Bacillus lactis acidii* in the "yoghurtmilch" preparation. These microbes all flourish in acid media, and are difficult to cultivate at first, but, once established, they persist. In the stomach and bowel, when once introduced, they will be found in the alimentary canal three weeks after the administration of "yoghurtmilch." Metchnikoff is of opinion that decomposition of the bowel and its consequences can be averted by the administration of this lactic preparation, as the intestinal flora is entirely changed by its presence. Winkler assured the meeting that the Vienna "yoghurtmilch" contained the three specific microbes, and acted as a genuine intestinal disinfectant by checking the growth of the *Bacilli coli*, *proteus*, *pyocyaneus*, and thus preventing sulphur and indol product from being formed in the alimentary tract. "Yoghurtmilch" would therefore be valuable in cases of tropical dysentery, typhoid bacilli carriers, and anæmic children, due in many cases to fouling in the bowels. He further added that the milk preparation should be taken after meals, that when fresh it should have a cheesy odour, and when whey separated it was too old to be used.

Escherich remarked that "yoghurt" entirely transformed the decomposition in infants.

Sperk affirmed that it cured lichen urticatus, chronic insomnia, but thought it should not be given to children before they reached their second year.

At the International Medical Congress, at Budapest, Dr. Bashford, of London, gave a lantern demonstration illustrating the progress which had been made in cancer research during recent times. He showed that there was no foundation for the supposition that cancer was due to a microbe.

## FROM OUR SPECIAL CORRESPONDENTS AT HOME.

## SCOTLAND.

**NEW PROFESSOR OF ANATOMY IN GLASGOW.**—The King has been pleased, on the recommendation of the Secretary for Scotland, to approve of the appointment of Mr. Thomas H. Bryce, M.A., M.D., Lecturer on Anatomy in the University of Glasgow, to be Regius Professor of Anatomy in that University, in succession to Professor Cleland, resigned. Dr. Bryce has been looked on as Dr. Cleland's probable successor ever since the resignation of the latter was announced. He enjoys a high reputation, particularly in the domain of embryology, in which he has done brilliant work. He is the editor of the new edition of "Quain's Anatomy," and has also published several papers dealing with archæological topics. Since 1892 he has lectured on Anatomy at Queen Margaret College, Glasgow. Dr. Bryce is a cousin of the British Ambassador to the United States.

**NEW PROFESSOR OF SURGERY IN ABERDEEN.**—The appointment by the Crown of a successor to Professor Ogston, Aberdeen, is also announced. Professor Marnoch, the new professor, is a native of Aberdeen, and is 42 years of age. He has held various surgical posts in the Aberdeen Infirmary and in the Children's Hospital there, and was at one time on the staff of the Aberdeen Eye Institution. In 1892 Dr. Marnoch began to specialise in surgery, and at the same time, while assisting Professor Hamilton, carried out some researches on the ætiology of cancer the results of which, published in 1901, attracted considerable attention at home and abroad. In 1900 Dr. Marnoch was appointed Surgeon and Lecturer on Clinical Surgery to the Infirmary, and since then has devoted himself exclusively to consulting and operative work.

## LIVERPOOL.

**DEATHS UNDER ANÆSTHETICS.**—The *Liverpool Courier* of the 3rd inst. reports an inquest that was held on the 2nd on the body of a man who had met with an accident the day before which necessitated, in the opinion of the medical man he consulted, an operation for the removal of bone. The man demurred to taking chloroform, but afterwards consented, and, while the anæsthetic was being administered, he collapsed and died. Artificial respiration had been resorted to, but without effect. At the inquest on the following day, Dr. Owen is reported to have stated that the man's organs were in a very bad state. Death was due to syncope, probably due to weakness following the shock of the injury. There is no evidence in the report of the inquest that any other medical man was present when the chloroform was administered than the one who was to perform the operation. Now it has often been emphasised, and it cannot be too often repeated, that when a case is important enough for the administration of an anæsthetic it is important enough for the attendance of a second medical man. No one should undertake to give an anæsthetic without some professional assistance. There is also a second point that deserves to be mentioned, and it is this concerning the preliminary administration of a stimulant whenever chloroform has to be given. A well-known physician, a staunch abstainer and public temperance advocate, will never allow one of his patients to have chloroform administered without a preliminary dose of half-an-ounce to an ounce of some alcoholic stimulant. It would be well if this rule were universally followed. If this preliminary dose of alcohol is advisable in ordinary cases, it is certainly much more urgently called for when the patient is suffering from the shock of a painful accident, and when the action of the heart is more than usually feeble. Possibly the stimulant was given in the case reported, but no mention was made of it in the published account.

WE regret to announce the death of Mrs. Lawson Tait, the widow of the famous Birmingham surgeon, which took place on August 27th at Exmouth.

## LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

### WASSERMAN'S FIXATION TEST FOR SYPHILIS.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—Dr. Helme's admirable paper in this week's number of your journal throws a great deal of light on Wassermann's fixation test for syphilis, but it should be remarked that this apparently complicated reaction has recently undergone considerable simplification.

In the *Lancet* of May 29th of this year, Dr. Fleming, writing from Sir A. Wright's laboratory at St. Mary's Hospital, describes "A Simple Method of Serum Diagnosis of Syphilis."

Instead of the guinea-pig serum sensitised to rabbit's blood required in Dr. Helme's description, Dr. Fleming, like Heslet, finds the necessary amboceptor, as well as a hæmolytic complement in the serum proposed to be tested.

The new method also dispenses with the portion of "liver rich in treponemes"; as Dr. Fleming's paper shows, an alcoholic extract of heart muscle acts just as well.

Dr. Fleming's results, I might add, have recently been contested (*Brit. Med. Journ.*, p. 377), but Dr. Clemenger, working in the same laboratory, has shown (*Brit. Med. Journ.*, p. 575) that these objections were quite unjustified.

I am, Sir, yours truly,

A. W. GILCHRIST, M.D.

Nice, September 3rd, 1909.

### TEMPERATURE-TAKING IN THE MOUTH.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—Is it necessary? I am glad to see attention called to this habit in your columns, page 186, August 25th, 1909, and that it has also been alluded to in the *Times*.

Personally, I regard the habit from a sentimental point of view as not a nice one under any circumstances, and repulsive if thorough cleansing is not observed. One marvels that three eminent medical men should have overlooked the claims for cleanliness in such a matter.

There is some difference between the temperature taken in the mouth and that taken in the axilla, but I do not believe that the difference is such as to vitiate the conclusions drawn from a practical point of view. There is another side to the question. In taking the temperature in the mouth, you shut it, and so waste some minutes which might usefully be employed in asking necessary questions and so shortening the duration of the visit to that extent.

I am, Sir, yours truly,

ONE WHO KNOWS THE VALUE OF TIME.

August 25th, 1909.

### THE DECLINING BIRTH-RATE.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—My aim was not to carry on a barren controversy, and I am afraid that, although I may, by your favour, publish further letters on this subject, I cannot reply to any more of Mr. Clement Sers' communications. His fundamental statements are not correct, and I am too dense to be able to follow his reasoning. It is not correct to state that the prosperity of Germany is due to the fact that "her numerous population cultivate the soil." Nearly the whole of her increase, over 25,000,000, since 1871, has gone to swell the population of the towns, and to carry on the industries which have been created during those years, and have converted Germany from an almost purely agricultural country into the greatest manufacturing people on the continent of Europe. The same change has not taken place in France. Her rural population maintains its relative proportions; her fertile soil could sustain many more millions than at present subsist upon it;

and her numbers, 38,000,000, have been barely kept up by immigration from Switzerland, Italy, and Germany. She has vast "colonies," and no people to send to them. She has lost her dominant position in Europe, and, without allies, would lie at the mercy of Germany. Other things being equal, the big battalions in a fight to a finish command victory, and Germany can call into the field almost twice as many men as France. Human nature in France is sufficiently like that in England to justify conclusions with regard to our own people from the phenomena observable there. Sociology is not an exact science, but evolutionary changes involving similar elements and forces are followed by similar reactions. M. Bertillon—an authority whom everyone will respect—has within the last few weeks declared that "France is marching rapidly to her ruin." He bases his statement on the population statistics. He shows that the lowest birth-rate prevails among the classes, who fully appreciate the injury their customs are inflicting upon the "*Patrie*" to which they are never tired of proclaiming their devotion. In 445 families of the intellectual *élite* he found only 575 children. The parents of such families are all able to rear and put out in the world a normal number of children. They refuse, and for purely narrow, selfish reasons. Then I may cite M. Paul Leroy-Beaulieu, a name which will be recognised as authoritative. He contributes an article occupying more than a column to the *Standard* of August 24th. He shows that without some compensation by immigration from abroad, depopulation in France would be absolute and continuous. He proves that marriages are as frequent in France as in other countries; that the low birth-rate is essentially voluntary; that a proportion of married couples do not care to bring children into the world; that a preponderating majority do not wish for a family of more than one child (at the maximum two); and that few have three children or more. He ascribes the motives to the selfish origins I have spoken of, and dwells upon their intensely anti-patriotic character. Among the causes of this moral decline he enumerates a taste for luxury and the decay of religion—the tendency of State education having been for twenty years systematically opposed to religion. The people have all come to believe that in bringing up two or three children they are making too great a sacrifice. M. Leroy-Beaulieu then enters into a lengthy description of a scheme for the endowment of large families, necessary, as he holds, in view of "the grave threat which is beclouding the future of France." This would cost many millions annually, but, "in contrast with so much wasteful expenditure of to-day, this would, at least, have the merit of being useful." My letter is already too long. To discuss the question fully would need a volume. I may with your permission return to it on another occasion.

I am, Sir, yours truly,

A STUDENT OF SOCIOLOGY.

September 2nd, 1909.

## OBITUARY.

BENJAMIN GRAY HEALD, L.R.C.S., L.F.P.S.  
GLASG., J.P.

AFTER an illness extending over several months, Dr. Benjamin Gray Heald, surgeon, died at his residence in East Leeds, in his sixty-third year. A son of the late Samuel Linley Heald, a well-known Leeds surgeon of a former generation, he followed in his father's professional footsteps. Immediately after qualifying, he commenced practice in Leeds, settling in the East Street district.

It was in 1889 that Dr. Heald made his *début* in the City Council, being elected as a Liberal in that year to fill a casual vacancy in the representation of the East Ward. He sat continuously for fourteen years, surviving three contested elections, and enjoying two unopposed returns. He filled many municipal offices, and was made Justice of the Peace in 1906.

**SIR STEPHEN MACKENZIE, F.R.C.P., M.R.C.S.**  
We regret to announce the death of a distinguished London physician and teacher in the person of Sir Stephen Mackenzie, at the residence of his son at Dorking, Surrey, on September 3rd.

This well-known physician, who was a son of Mr. Stephen Mackenzie, of Leytonstone, and a brother of the late Sir Morell Mackenzie, was born in 1844. He received his education at Christ's Hospital, and medically at the London Hospital and at the Universities of Aberdeen and Berlin. He took his M.B. degree (highest honours and special honours for his graduate's thesis) at Aberdeen in 1873, and his M.D. degree two years later. He became M.R.C.S. of England in 1869, and a member of the Royal College of Physicians in 1874, and a Fellow of the latter College in 1879. Amongst other posts he was Consulting Physician to the London Hospital, the Poplar Hospital, and the Royal Ophthalmic Hospital, and an ex-President of the Metropolitan Counties Branch of the British Medical Association. He was formerly Lecturer on Medicine and Pathology at the London Hospital Medical College, and he carried on an extensive private practice. His publications include numerous articles in medical dictionaries and periodicals.

Sir Stephen Mackenzie married, in 1879, Helen, the youngest daughter of Mr. Benjamin Dulley, of Wellingborough, and had three sons and one daughter. He was created a knight in 1903.

## MILITARY & NAVAL MEDICAL NOTES.

**INDIAN MEDICAL SERVICE FAMILY PENSIONS.**—The Government of India has been pleased to decide that officers of the Indian Medical Service who subscribe to the Indian Military Service Family Pensions should in future do so under the same conditions as officers of the Indian Army—i.e., their classification should be regulated according to length of service, instead of, according to rank, as follows:—Surgeon-Generals should be allowed to subscribe in Class I., as hitherto; Class II., officers of 20 years' service; Class III., officers of 12 years' service; Class IV., officers of 6 years' service; Class V., officers of less than 6 years' service. No existing subscriber should be reduced to a lower class than that in which he now subscribes. The orders will have effect from May 16th, 1909.

**MEDICAL SERVICE.—TERRITORIAL TRAINING.**—The *Times* military correspondent, reporting on the auxiliary services of the Territorials, says that he has not had time to examine these in detail, but promises to do so later on. He says, however, that from things seen and from the opinions of qualified authorities, these services have done very well. As to the medical service, it is spoken of as "very efficient"; its *personnel*, officers, and men decidedly good, and every opportunity taken to exercise it. The promised later report in detail will be interesting and instructive. As everything is now done to render the medical branches of both Regulars and Territorials efficient, we anticipate a favourable judgment.

**MILITARY NURSES.**—Head nurses employed in military families' hospitals other than Aldershot are to receive pay at the rate of £55 per annum, increasing by £2 yearly to a maximum of £65. Assistant nurses are to receive £35 per annum, increasing by £2 annually to a maximum of £45.

**IMPROVED HEALTH IN THE ARMY.**—Lord Kitchener's circular letter, issued in Simla this month, draws attention to the great improvement in the general health of the British and Indian troops. The death-rate of the former has fallen from 17.13 per 1,000 between the years 1894 and 1903 to 9 per 1,000 in 1908, and the constantly sick in hospital from 5,384 to 3,139,

which means an addition of 2,000 to the fighting line and a saving of 500 lives yearly. Enteric formerly averaged 1,476 attacks and 380 deaths yearly; now there are 998 cases, with 188 deaths. Dysentery has been reduced to one-half, malaria to two-thirds, and venereal diseases to one-fifth, and the men invalided from 2,123 to 905. The death-rate of the Indian Army has been reduced from 11.33 per 1,000 to 7.41, and the constantly sick from 3,721 to 2,749.

**R.A.M.C. INSTRUCTION.**—A camp of instruction for the Royal Army Medical Corps has been opened at Bulford, on Salisbury Plain, for the training of detachments of the corps in field hospital duties. The camp will remain till September 25th.

**FRENCH FIELD HOSPITALS.**—Considerable improvement has recently been made in field medical organisation of the French Army. Uniformity has been obtained by the provision of ambulances equipped and organised in the same way, and the variety which has existed up to the present in both ambulances and in the field hospitals has disappeared. The new system, the *Military Mail* reports, resembles that of our own Army, having, among other branches, a stretcher-bearer section and a sanitary section for hygienic investigation, disinfection, and similar duties.

**MILITARY SANITATION.**—With this title a most important and portable book has just been brought out by Major R. J. Blackham, R.A.M.C., D.P.H., Sanitary Officer to one of the divisions of the Indian Army, with headquarters at Cherat, near Peshawar. Major Blackham has spared no pains to bring all that bears on the health of the soldier into a reasonable compass, and is to be congratulated on having achieved this object. No Army Medical officer's portable library should be without this work. Space does not permit of going into a notice of the chapters on air, water, food, clothing, housing, disinfection, communicable diseases, camp and march, venereal disease, etc., etc., which are all well handled.

## REVIEWS OF BOOKS.

### THE MATHEMATICS OF HYGIENE. (a)

THE popularity of this little book is attested by the fact that a fourth edition has been quickly called for. The subject-matter dealt with usually presents great difficulty to the average candidate for a public health diploma. Medical men, as a rule, know little regarding the intricacies of mathematical calculations; in fact, the writer of this useful guide—for such it is—takes for granted that his readers know little or nothing about the methods of chemical and physical calculations. As a consequence, he supplies the knowledge lacking in an extremely elementary and readily understood form. The best recommendation we can give this book is to state that we have personally known candidates who, when they started to study it, knew practically nothing about mathematical methods, but who, when they had finished, were able to give an intelligible account of the subject.

The subjects dealt with, include, amongst others, the laws of gases, hygrometry, hydrostatics, heat, ventilation, rainfall, and sewerage, while logarithms, the bugbear of students, receive very special attention. The present edition contains some thirty odd pages more than the last, while the text is arranged in a much more consecutive manner than before. Thus the various matters which were treated of in an appendix have now been placed in the text, which makes the study of the book much simpler. Several new examples, mostly culled from recent examination papers, have been added. A special feature of this edition is the new chapter dealing with the construction of life-

(a) "Aids to the Mathematics of Hygiene." By R. Bruce Ferguson, M.A., M.D., B.C.Cantab., D.P.H. Eng., etc. Fourth Edition. Pp. x., 182. London: Baillière, Tindall and Cox. 1909. Price: cloth, 2s. 6d. net.

tables. This, we consider, is a most valuable addition, and one which practitioners and students are sure to appreciate. The method adopted in the preparation of life-tables is somewhat complicated, but the author has done everything, humanly speaking, to make it as easy as possible for the public health student.

Taking the book as a whole, we may safely express the opinion that it is the very best that candidates for public health diplomas can use; in fact, there is none other which covers the same ground. It really supplies all the information required on this particular subject, and it is therefore only a waste of time to study larger works, which too often only serve to confuse rather than to aid the student. We trust this fourth edition will meet with as hearty a reception as its predecessors. It certainly deserves it, and the author is to be congratulated on the success of such a compact, accurate, and at the same time eminently helpful volume. It well sustains the high reputation of the excellent "Aids Series" in which it appears.

#### ABDOMINAL HYSTERECTOMY. (a)

THIS small volume contains essays on the title subject and five others, all of which afford interesting reading, and coming from so well known a pen as that of Mr. Bland-Sutton, are sure to be read with interest. The statistics for abdominal hysterectomy in eight London hospitals in 1896 are compared with those of 1906, and show the great advance made in that decade by this operation, the mortality falling from 22.5 to less than 2 per cent. The author puts in a plea for the use of rubber gloves by all connected with the performance of hysterectomy, as this practice not only reduces the mortality, but the unpleasant sequelæ also, especially trouble with the ligatures and sutures. His experience supports the view that fibroids produce changes in the endometrium, inflammatory, etc., which tend to induce cancer, and that in patients over 50 years of age operated upon for fibroids 10 per cent. have cancer—his own experience was 8 cancers out of 63 cases—therefore this must be looked for immediately at operation, and if found or suspected the cervix must be removed. With regard to cancer developing in the cervix left after sub-total hysterectomy, its occurrence is divided into four classes:—1, existing at time of operation and overlooked; 2, developing subsequently; 3, the original growth was malignant, sarcoma; 4, the new growth is a granuloma. Dealing with sarcoma, he considers the most insidious danger is the occurrence of encapsuled sarcoma in the guise of an innocent fibroid. He records a case (p. 9) to illustrate this, and is sceptical about the degeneration of fibroids into sarcoma. He has a decided preference for sub-total hysterectomy, especially in spinsters and barren women, and is strongly in favour of retaining one ovary if healthy, as it modifies and postpones the symptoms of the menopause, but these occur in a few years from atrophy of the retained ovary, the period of time depending on the age of the patient at the time of operation. He deals very fully with injuries to the ureters in the third essay. The most dangerous occur in connection with sub-total hysterectomy, as they are most often overlooked: the method of treatment depends on the time the condition is recognised, and is divided into primary and secondary, varying from suturing of the ureter and implantation into the bladder to excision of the kidney. The method of Lutaud for implantation into the bladder is described in detail. In the fifth essay on thrombosis and embolism, he refers to the coagulation due to the extension of cancer cells into a blood vessel, and points out that although the view is held that cancer cells promote thrombosis, he considers that this is due to infection of the tumour and the influence on the blood by the micro-organisms and their toxins. Post-operative thrombosis is divided into three groups:—1, the involvement of the saphenous veins usually due to infection from the abdominal incision

by route of the superficial epigastric veins; 2, of the femoral and iliac veins, the infection proceeding from the vessels about the stump, especially the uterine veins; 3, of the ovarian veins, as a sequence to uterine sepsis. The author considers that ligation of the veins holds out hope of success in treatment in chronic cases of infective thrombosis, but that in acute cases it is unsuitable, and that there is need of further experience to teach the kind of puerperal pyæmic cases in which it is likely to be successful. Pulmonary embolism is also dealt with, and it is shown how a small embolus may be sufficient to cause blocking of the pulmonary artery. The last essay is on adenomyoma of the uterus and tuberculosis of the endometrium.

#### HYGIENE IN THE TROPICS. (a)

EVEN among the most civilised of Western nations the knowledge of the principles of hygiene is far in advance of the practical application of them. There are, we believe, two main reasons for this state of things, the influence of both of which will diminish with the progress of civilisation. First, there is the apathy of the public due in a large measure to ignorance, but also to a spirit of conservatism, which one so often hears expressed when progress means expenditure for the attainment of an end apparently only indirectly advantageous. The second cause which has retarded progress is the inherent difficulty of the application of general principles to actual practice. Such application must at first be tentative and experimental, yet the experiments must often be made on such a large scale, and involve so much expense, that one does not wonder that public bodies hesitate to undertake them. The knowledge of how best to adapt general principles to local conditions can only be learned by experience, and experience must often be bought by failure. Too often, we fear, the inability to recognise the necessity for this adaptation has been the cause of failure, and sanitarians themselves have brought discredit on their cult by a too strict adherence to what they believed were immutable principles. In tropical climates the difficulties of the sanitarian are enormously increased, and not only so, but the penalties for failure are much more severe. Indeed, the very existence of a civilised community in tropical climates is dependent on the success of the sanitary administration. Dr. Simpson has done good service in the book before us, not only in elucidating principles, but also in showing how those principles are to be applied under the very varying circumstances of tropical and sub-tropical administration.

#### NEURASTHENIA. (b)

THE fact that Dr. Ballet's book has already reached a third edition in the original French is in itself a justification for the issue of it in the English language. The teaching of Dr. Ballet is so well known that it is unnecessary to enter into an elaborate criticism of it. We are not inclined to accept Dr. Ballet's conception of neurasthenia as a definite "somatic disease of the nervous system," and would rather consider it as a symptom of many different physical disabilities, the recognition of which, with our present knowledge, is always difficult and sometimes impossible. Until our knowledge has very greatly increased, the term "a neurasthenic" will have a large denotation, and while it has, those whom it denotes must be treated on principles such as are laid down by our author. To those interested in the treatment of such patients, we can recommend Dr. Ballet's book, and those who wish to read it in English may with every confidence turn to Dr. Smith's translation.

(a) "Essays on the Position of Abdominal Hysterectomy in London," By John Bland-Sutton, F.R.C.S. Eng., Senior Surgeon, Chelsea Hospital for Women, Surgeon to the Middlesex Hospital. With thirteen illustrations. London: James Nisbitt and Co. 1909.

(a) "The Principles of Hygiene as applied to Tropical and Sub-Tropical Climates, and the Principles of Personal Hygiene in them as applied to Europeans." By W. J. R. Simpson, M.D., F.R.C.P. Octavo, pp. xii. and 396. Illustrated. London: John Bale, Sons and Danielsson, Ltd. 1908.

(b) "Neurasthenia." By Gilbert Ballet. Translated from the Third French Edition by P. Campbell Smith. Octavo, pp. xxviii. and 408. London: Henry Kimpton. 1908.

## NOTICES TO CORRESPONDENTS, &c.

**CORRESPONDENTS** requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

### SUBSCRIPTIONS.

SUBSCRIPTIONS may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s.; post free at home or abroad. Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially-appointed agents. Indian subscriptions are Rs. 15.12. Messrs. Dawson and Sons are our special agents for Canada.

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CONTRIBUTORS are kindly requested to send their communications, if resident in England or the Colonies, to the Editor at the London office; if resident in Ireland to the Dublin office, in order to save time in reforwarding from office to office. When sending subscriptions the same rule applies as to office; these should be addressed to the Publisher.

### NOTICE TO HOSPITALS AND COLLEGE DEANS.

THE Editor desires to thank the above gentlemen attached to the various Schools and Hospitals for supplying him with the information from which the foregoing pages have been composed.

### NOTICE TO OUR READERS.

As this number is mainly devoted to information necessary for students intending to join one or other of the various medical colleges, and for those who, having passed their curriculum, are about to enter the ranks of the profession, much of the ordinary matter which usually fills our columns is necessarily deferred till next week.

### GRATUITOUS COPIES

A VERY large number of copies of this issue are being sent gratuitously to all the educational establishments, hospitals, reading-rooms, clubs, and large hotels in the United Kingdom, and to a large number in America, India, the Colonies, and on the Continent. Should any of our readers desire to present a copy to a patient or friend who contemplates sending his son to a medical school, our publisher will be happy to supply him with a duplicate free of cost on receipt of address.

### A ROCKEFELLER STORY.

Of the many stories that are in circulation about Mr. Rockefeller there is one which is not only absolutely authentic, but which throws a curious light upon the character of the famous millionaire. Many years ago Mr. Rockefeller was a clerk in a Chicago house, at a salary of two pounds a week. He had an ailment which required a simple and harmless operation. He went to a surgeon of high repute in Cleveland, and arranged to pay so much a month. Not long ago the old complaint manifested itself again, and Mr. Rockefeller sent for the doctor of his youth. When the examination was over, he remarked, "I won't keep you waiting for your money this time. Things have changed with me." "Oh," said the other, "I am out of practice; I wish no fee." Mr. Rockefeller stepped to his desk, placed bills to the amount of £250 in an envelope, and handed them over to the surgeon with the remark, "Well, if you don't want to take a fee, perhaps you will kindly give these to some poor young doctor of your acquaintance."—*M.A.P.*

F. S. TOMLINSON (Kent).—Yes; much might be done by the appointment of a conscientious and capable health visitor. In a poor district an immense amount of good may be effected by a tactful official of that kind in the course of a house to house visitation. To mention a few elementary points, the gospel of the open window and of the open chimney may be taught, the cleansing of houses, and the tending and feeding of infants. It is of course essential that a suitable visitor be chosen, and that she should work loyally under the Medical Officer of Health.

### THE LAW OF EVIDENCE.

A correspondent asks if he is compelled by law to give evidence, confidentially obtained, in a case in which he is summoned as a witness, or whether he can legally refuse to answer when questioned? We are afraid that in law a medical man has no privilege to avoid disclosing evidence. Of course he is not expected to act as a detective, nor to go out of his way to gain evidence. On the other hand he should not withhold information likely to shield crime.

OMI PROFANUM VULGUS.—The place you mention is known to us, and although picturesque and restful, we fear it cannot be

recommended as a residence for any visitor in search of health. Sanitation is imperfect, consisting of earth closets and cesspools. There is no proper water supply, and water for domestic purposes is obtained from shallow surface wells, the water of which is liable to constant contamination by slop water habitually thrown upon a sandy and pebbly soil. How such a condition of affairs is tolerated in a so-called health resort is a profound mystery.

## Vacancies.

Stirling District Asylum.—Assistant Medical Officer. Salary £125, with board, etc. Applications to the Medical Superintendent. City Fever Hospital, Little Bromwich, Birmingham. Resident Assistant Medical Officer. Salary £120 per annum, with board, lodging, washing, etc. Applications to the Medical Superintendent. The Royal Portsmouth Hospital, Portsmouth. Senior House Surgeon. Salary £100 per annum, with board, residence, laundry, etc. Applications to B. Wagstaff, Secretary. British Ophthalmic Hospital at Jerusalem.—Assistant Surgeon. Salary £300 per annum, with house. Applications to the Honorary Secretary, British Ophthalmic Hospital, St. John's Gate, Clerkenwell, London, E.C. Bradford Poor Law Union.—Assistant Resident Medical Officer. Salary £130 per annum, with rations, apartments, and laundry. Applications to George M. Crowther, Clerk to the Guardians, Union Offices, Manor Row, Bradford. Newcastle-on-Tyne Dispensary.—Visiting Medical Assistant. Salary £160 per annum. Applications to the Hon. Secretary, Joseph Carr, Chartered Accountant, 26 Mosley Street, Newcastle-on-Tyne. Southwark Union, London.—Assistant Medical Officer at the Infirmary, East Dulwich Grove, S.E. Salary £100 per annum, with board, lodging, and washing. Applications to Sydney Wood, Clerk, Union Offices, John Street West, Blackfriars, S.E. Great Yarmouth Hospital.—House Surgeon. Salary £100 per annum, with board, lodging, and washing. Applications to Richard F. E. Ferrier, Hon. Secretary, 33 Hall Plain, Great Yarmouth. York Dispensary.—Resident Medical Officer. Salary £130 a year, with board, lodging, and attendance. Applications to Dr. Swanson, The Pleasaunce, Heworth, York. Sussex County Hospital, Brighton.—House Surgeon. Salary £120 with board and residence in the Hospital with washing. Applications to the Secretary. Fermanagh County Asylum.—House Surgeon (Anesthetics). Salary £72 per annum. Applications to C. Wilson, Secretary. (See Advt.).

## Appointments.

COWPER, C. M. L., M.R.C.S., L.R.C.P.Lond., Certifying Surgeon under the Factory and Workshop Act for the Arnesby District of the county of Leicester. CROWLEY, RALPH HENRY, M.D., M.R.C.P.Lond., Assistant Medical Officer to the Board of Education. GRAHAM, H. L., M.B., B.S.Lond., Assistant Medical Officer of the London Open-air Sanatorium, Wokingham. JARVIS, JOHN, L.R.C.P.Lond., M.R.C.S.Eng., District Medical Officer by the Bath Board of Guardians. LAWRY, RICHARD COGER, L.R.C.P.Lond., M.R.C.S.Eng., Medical Officer to the Penzance Education Committee. McDONALD, JAMES, M.B., M.S.Edin., Certifying Surgeon under the Factory and Workshop Act for the Belford District of the county of Northumberland. SCRUBY, Miss Z. M., M.B., B.S.Lond., School Medical Officer to the Isle of Ely County Council. THOMSON, ERIC A., M.B., Ch.B.St.And., Medical Officer to Dundee Poorhouse. WATSON, HENRY ELLIOTT, M.B., Ch.B.St.And., Resident Medical Officer in King's Cross Fever Hospital, Dundee. WELCH, CHARLES HERBERT, L.R.C.P.Lond., M.R.C.S.Eng., District Medical Officer by the Bath Board of Guardians.

## Marriages.

HARRIS-THOMSON.—On September 2nd, at the Parish Church, Stroud, Herbert Elwin Harris, B.A., M.B., Cantab., F.R.C.S.Eng., Clifton, Bristol, to Nellie De Winton, second daughter of Major-General David Thomson, R.E., Cheltenham. HUGHES-RAY.—On September 1st, at St. Anne's Church, Kew, Ernest Cranmer Hughes, M.C., F.R.C.S., son of Dr. and Mrs. Hughes, of Plymouth, to Constance Ellen, daughter of the late Humphrey Hinton Ray and Mrs. Ray, of Kew.

## Deaths.

BERNAYS.—On August 30th, at Shirley, Warwickshire, suddenly, Sarah Jane (Saar), widow of the late Herbert Leopold Bernays, M.R.C.S., of Old Charlton, Kent, aged 63. HULME.—On August 27th, at Malta, T. Haylock Hulme, M.B. Durham, L.D.S., R.C.S.Eng., aged 33. MACKENZIE.—On September 3rd, at Rose Hill, Dorking, in his 65th year, Sir Stephen Mackenzie, M.D., F.R.C.P., late of Cavendish Square, and for many years Senior Physician to the London Hospital.

# THE MEDICAL PRESS AND CIRCULAR.

"SALUS POPULI SUPREMA LEX."

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WEDNESDAY, SEPTEMBER 15, 1909.

No. II.

## NOTES AND COMMENTS.

**The New Hall of the London Royal Colleges.** THOSE to whom the examination hall on the Victoria Embankment of the Royal College of Surgeons of England and the Royal College of Physicians of London are familiar will probably hear with some regret that the hall has been sold and that a new one is to be built in Queen Square, Bloomsbury, W.C. The new site will probably be of less value than the old, so that the Colleges should acquire a handsome sum as the result of the change. At the same time it is to be regretted that such old and wealthy corporations should not have retained so fine a building on so fine a site as that upon the Embankment. The combination of the Royal College of Surgeons of England with that of the Physicians of London emphasises the conservatism of the latter body. The Medical Act of 1858 plainly contemplated the Physicians changing their title to that of England, "by means of a new charter for which due powers were given." Possibly, however, a new charter would have necessitated other innovations, such as an examination for the diploma of fellow, so as to bring the Physicians more into line with the Surgeons. At present we have the anomaly of a fellowship given by the one only after rigorous examination, but by the other as a simple courtesy distinction bestowed upon a limited number of members. It is only on the lower planes that the Colleges meet, and even then their respective planes differ by the gulf that lies between the member and the licentiate.

**Dutch Oysters and Infection.** THE oyster trade, both at home and abroad, seems destined to receive periodical shocks, and there is every likelihood of the continuance of the adversity until the whole trade, from sea-bed to customer's table, is stringently guarded from any possibility of contamination. The Dutch government, alive to the influence of cholera scares upon this particular industry, have written to the London Fishmongers' Company through their Superintendent of Fisheries to the effect that, "Oysters with certificates are absolutely free from possible choleraic infection. I have taken all measures of precaution." How, we may ask, is the consumer to know that any given oysters have been sold under guarantee? Years ago, THE MEDICAL PRESS AND CIRCULAR suggested that the only way out of the wood was to stamp each individual shell with a mark identifying place of origin and date, according to a plan that was, we believe, protected at the time by a medical man. Meanwhile, the oyster trade has languished steadily, although there are probably enough admirers of the oyster to bring back a fair amount of prosperity were means taken to guarantee the purity of all

oysters sold by an indelible mark, or token affixed to the shell. We commend the idea, even at this late hour, to the commonsense of the Fishmongers' Company.

**Short Hair for School-girls.** THE close-cropped head of hair has long been recognised as the best of fashions for the school-boy, who, as a rule, favours that particular plan for the rest of his days. Short hair, however, is the exception in the case of school-girls, who at that early age appear to be, as a rule, fully conscious of the attractiveness of that peculiar product of evolution. Nor is it likely that mothers generally will consent to send their girls to school shorn of their long locks. A medical officer of health recently issued a circular to the parents in his district asking them to get their girls' hair cut short, and adding his opinion that some day long hair in school-girls will come to be recognised "as a badge of uncleanness." This action appears to have been resented by the parents; at any rate, it is announced that after the holidays the children returned to school without a single response to the official appeal. For all that, we think the medical view was correct, and that for various reasons the practice of cropping the heads of school-girls is to be advocated, not only in the case of children attending public schools, but in all ranks of society. Fashion, however, is not likely to be readily moved to listen to the voice of reason in a matter of this sort.

**Parsimonious Salford Guardians.** THE need of a vigorous central Poor-law administration is, from time to time, made apparent by the newspaper chronicles of parsimony that hail at uncertain intervals from various parts of the kingdom. One of the latest eccentricities of the kind is reported from wealthy Salford, a brief note of which will be found in our news column. The Guardians, on the retirement of the present senior resident medical officer, have determined to cut down the salary by £70, and at the same time to reduce his status. Their action has been taken in face of the opinion of Dr. McVail, in the Report of the Royal Commission, that their institution, with its 500 patients, was understaffed. A Local Government Board inspector has since emphasised that position. It now remains to be seen what the Central Board will do now that the Guardians have wantonly filled up the cup. It would be difficult to imagine a case in which strong central administrative control could be more urgently needed. The medical profession, it is encouraging to note, have not remained quite passive under this mean and miserly encroachment—that is to say, if there be any truth in the general surmise



that the absolute dearth of applicants for the post is due to the action of that body. The inadequate pay of many Poor-law medical appointments deserves the careful attention of the Local Government Board.

#### Yellow Fever in Barbadoes.

IN the course of a recent editorial discussion of the scientific control of tropical disease it was stated that yellow fever had virtually ceased to exist wherever scientific methods for its prevention had been persistently brought to bear. A statement by the Governor of Barbadoes since published, forcibly illustrates that remark. Prior to December, 1908, the Colony had been entirely free from yellow fever for a period of 26 years. One case was, however, reported in that month, and up to 14th June 86 cases in all were notified. Of the persons attacked 32 were white, and 54 coloured—15 of the former and 21 of the latter cases resulting fatally. No cases occurred amongst visitors to the colony, nor amongst foreign seamen. The estimated population of the colony is 194,477; the average death-rate has for years been under 11 per 1,000. In former days, certainly less than 50 years ago, such an outbreak would have probably been followed by a widespread epidemic with a very high rate of mortality.

## LEADING ARTICLES.

### THE ENDOWMENT OF MEDICAL SCIENCE.

THE necessity of the adoption of scientific methods by the State for the development of national resources is becoming more and more recognised by modern statesmen of all countries. An increasing amount of money is being spent yearly in that direction by the legislature of the United Kingdom, but the total sum thus expended represents no more than a comparatively small fraction of the national expenditure. One of the most recent examples is the grant of £20,000 to Lieutenant Shackleton, whereby the Government has formally recognised the claim of the private citizen who has risked his life and fortune in the altruistic pursuit of scientific discovery. News has just come to hand from America of the tour through Southern Russia and the less-known region of Asia of Professor Monro, of the United States Board of Agriculture. His mission is the search for new plants and grains that may be utilised for the benefit of American agriculturists. A striking illustration of the practical value of acclimatisation of the kind was afforded ten years ago by the discovery of a peculiar kind of wheat in Southern Russia, capable of flourishing in regions where the rainfall for the year did not exceed twelve or fifteen inches. But, happily, there is no need to cross the Atlantic for inspiration, for excellent work has been done at home for many years past in the ancient University of Cambridge. The special correspondent of the *Times* not long ago gave an account of some interesting and valuable practical results whereby a strain of wheat had been secured combining the superior milling and baking qualities of foreign grain, with an immunity, or, at any rate, a greatly increased resistance to "rust" and other destructive parasitic

maladies. Amongst other work done in the Cambridge laboratories is the introduction of a drug that destroys the ticks which convey various maladies to cattle, especially the so-called "red-water." If this drug proves efficient in practice, it will infallibly save the nation many millions a year. Indeed, in whatever direction we turn, we find science, in response to a liberal expenditure of time, labour and money, ready to restore the capital with a hundredfold of interest. Curiously enough, although a fair start has been made in the scientific investigation of physical and comparative science, yet comparatively little has hitherto been done by the State for the advancement of medical knowledge, although the advantage to be gained thereby in the safeguarding of the national life is infinitely greater. The cost of a single great warship would found and endow a first-rate scientific laboratory, from which the nation would be repaid a handsome interest by way of the prevention and palliation of human disease, a return that compares triumphantly with the absolutely unproductive expenditure on armaments. Some day the nation will learn to look upon science as the surest guide to the Millennium and to deduce from a selfish point of view that one of the most paying national investments is the endowment of scientific research. For some strange reason mankind appears to be in many ways more careful of the lower animals than of its own species. Take the case of the measures now being taken to control and eradicate glanders, foot and mouth disease, cattle plague and swine fever. Were a similar amount of State money and energy to be expended upon, say, human tuberculosis or diphtheria, who could doubt that the community would before the lapse of many years be more than repaid for their enterprise? There is no apparent reason why the study of human disease should not be a duty of the State any less than that of the lower animals. The recognition of the national responsibility of investigating the parasitic diseases of wheat and of cattle implies application of a similar duty to the far more valuable animal man, who has actually created the State as a means of collective protection and advancement. Of the many parasites upon the national health, it will suffice to mention the vast canker of quackery that is being permitted to eat deep into the heart of the community. Were the shameless, lying and fraudulent remedies and methods now openly advertised for the use of man to be transferred to the treatment of lower animals, it might be pretty safely predicted that Government would at once interfere and insist upon proof of the vendor's claims. In other words, the State that has recognised the necessity of a national study of the diseases of the lower animals, to say nothing of prevention and treatment, has not yet realised its responsibility as regards its own citizens. It is to be hoped that the tardy action of the General Medical Council in approaching the question of false medical practice will stimulate the Government to a juster perception of the facts of the situation. Meanwhile, it is comforting to note the magnificent, though inadequate, contributions

of private philanthropy that are from time to time bestowed upon the noble object of the scientific advancement of scientific medical research.

### THE HOUSING BILL AND MEDICAL OFFICERS OF HEALTH.

NINE well-known members of Parliament, who describe themselves as friendly to the objects of the Housing and Town Planning Bill, have issued a joint protest against what they style certain grave blots upon that measure as it now stands. With most of their criticism we have nothing to do; we are concerned only with that which refers to a question affecting the profession, the clauses of the Bill intended to improve the status of medical officers of health. By Clause 68 it is enacted that the Local Government Board is to prescribe the duties of county medical officers of health; but as these officers are appointed by County Councils and paid exclusively from county funds, the protesting members submit that it is inconsistent with local self-government for a Government Department, under such circumstances, to prescribe and vary the duties of these officers at its pleasure. Then, by the same clause, it is enacted that County Councils can dismiss their medical officers only with the leave of the Local Government Board. To this the signatories to the protest object, on the grounds that it shows a distrust of large local authorities, for which there is no excuse, and that the position of a medical officer maintained in office after having lost the confidence of his Council would be intolerable. It seems remarkable that a tendency to revert to bureaucratic methods should be manifested amidst a constant effort to democratise the whole system of government, and that the President of the Local Government Board in the present Liberal Cabinet should lay himself open deliberately to the charge of "curtailing and subordinating the powers of local self-government to the aggression of a paid bureaucracy." The fact is, however, that officers of the Local Government Board in every branch of that office are fully aware that local government is very largely a failure throughout the country; and it seems probable they have imbued the President with the same feeling. Nowhere has this practical failure of local government been more conspicuous than in the case of our rural districts, where sanitation is not infrequently of a mediæval type, and where the medical officer of health is commonly a general practitioner, ill-paid and absolutely powerless in the hands of his rural authority, composed of members who are eager to defend their private and purely selfish interests. The future of rural sanitation depends to a great extent on the institution throughout the country of county medical officers, well-paid, specially qualified and independent of the local authorities. County councillors are the *élite* of urban governing bodies, and if they cannot be trusted to engage competent medical officers, and to maintain the best possible relations with them in every respect, what can be expected from smaller urban and rural authorities, which are mostly filled by men of inferior value in every respect? The chief remedy for the present state of things lies in improving the quality of local

governing bodies, from county councils downwards; and this can be done only by rousing the spirit of patriotism, and especially of local patriotism, and by thus getting what is best among the citizens in real personal worth and intellect fully represented upon all local governing bodies. A truly appalling amount of apathy is at present displayed everywhere in this direction, and unless it can be overcome great part of the enormous mass of new social legislation must remain inoperative. There is further the danger of corruption, which, even the worst examples of local administration were formerly not thought capable of, but which has been latterly discernible in many previously unsuspected quarters. A restricted reversion to bureaucracy, directed by a scientific and expert, central authority, may yet be witnessed in many departments of our social administration. Such methods have produced, and are still producing, enviable results throughout the German empire, and are furnishing an example which may one day well prove irresistible in our own country. Meanwhile, it may be hoped sincerely in the interests of the nation that Mr. John Burns' tenure of office may be distinguished by the nominal creation of the County Medical Officership of Health.

### CURRENT TOPICS.

#### The Opsonic Index and Vaccine Therapy and Immunisation.

ST MARY'S HOSPITAL, and the Mount Vernon Hospital are each making appeals for funds for their special departments of vaccine therapy and immunisation. The department in St. Mary's is under the direction of Sir Almroth Wright, F.R.S., that of Mount Vernon under Dr. R. W. Allen. The preparation of vaccines is a laboratory work requiring both much time and the highest attainable degree of skill and care; and, as every medical reader is aware, the administration of the vaccines has still to be guided constantly by frequent microscopical examination of the blood, which at present can be conducted only by experts. The money is wanted for the maintenance of the necessary laboratories, and laboratory workers, as well as for the support of wards in which treatment can be conducted under conditions most favourable for scientific observation. The results that have so far been achieved are so far promising; and given the means to pursue his researches and experiments, there need be no doubt he will be able to bring the treatment in due course within the scope of all ordinary medical practice. The prevention of disease vitally concerns the general public, and when funds are needed such as are now asked for they ought surely to be forthcoming. Although medical men ought not to be taxed in order to help in prevention of disease, the source of their income, we do not doubt that they will, as usual, contribute towards the funds. A great part of medical research work has always been paid for out of the pockets of doctors; whilst those who devote their lives to the pecuniarily unprofitable work of pure science, never receive from the State or the public any adequate return for their sacrifices on behalf of humanity.

As regards the opsonic index and accompanying methods they have now been before the profession for several years, and it is to be regretted that no simplification has been introduced in order to bring their benefits within the reach of the general practitioner and within the means of the general public.

#### Russia and the Cholera.

The Nemesis that sooner or later overtakes the neglect of sanitation has fallen upon slothful Russia with remorseless vigour. From the latest advices—which will be found in our news column—cholera is claiming 25 victims daily in St. Petersburg alone, while 5,709 deaths from that cause have been recorded since the beginning of the year. A curious contrast is offered to the prevailing mists of ignorance and prejudice by the fact that no less than 53,182 inhabitants have submitted to preventive inoculation, and of these it is stated that twelve only have contracted the disease. Apart from that redeeming feature there could hardly be a more forcible example of the disastrous results of national neglect of the primary laws of health than that afforded by this unhappy country. Cholera, as the world learnt long ago, is a filth disease spread mainly by the agency of specifically polluted water. The water supply of St. Petersburg is hopelessly polluted and indeed plumbs therein a sanitary depth somewhat comparable with its sewage disposal. A year ago the City Fathers announced their intention of obtaining a fresh water supply and a new drainage system. They are apparently still dreaming of these far-off advantages, for their latest energies seem to have been diverted to the construction of town filters, which probably mean that they are seeking a less costly and less troublesome alternative to the only one that would be permitted by any tolerable public standard of health, namely, the institution of an absolutely new and irreproachable water supply.

#### The Government and Quack Medicine.

If the quack medicine trade were merely a question of pocket-picking and plunder it ought to be dealt with by the Legislature; the fact that, besides being to the last degree fraudulent, it involves the infliction of suffering and misery upon the simple and ignorant masses, renders the intervention of the State imperative. Medical quackery, if it can be classed only among the smaller of the evils afflicting society, is at least big enough to claim the attention of all members of Parliament who put in the first place the welfare of the people. Unfortunately, the majority of members are ignorant of the facts; but if Captain Craig will continue to keep the subject to the front there seems a fair hope that the needed enlightenment may before long be diffused. In another column will be found a report of the question put by Captain Craig in the House last week with reference to the medicine stamp duty. It is abominable that the national income should be augmented by sharing the profits of an iniquitous traffic; and it is certainly true that the purchasers of quack medicines—as Captain Craig suggested—do take the stamp to imply that the contents have the Government approval. The vast majority of the

victims of coarse quackery are ignorant, and to most of them the stamp means that the stuff they are relying upon is at least a genuine article; they cannot, at any rate, be made to believe that the Government would put its apparent sanction upon what is really a worthless, if not a harmful, imposture.

#### Basement Houses.

THE day is already dawning, we believe, in which the basement house will go to join the curfew bell, the dodo, and other relics of the past, in oblivion. A speaker at one of the recent Congresses said:—"For the ideal city there will be no houses with basements, which help to spread disease, especially tuberculosis." We cannot, however, claim for hygiene the chief word in the beneficent change which is taking place, for though its influence is all on the anti-basement side, the question has already been decided by the economic pressure of the domestic servant. This indispensable creature, thinking more of her legs than her lungs, has voted against basements, and we who are the servants of our servants are making haste to comply with her demand, and non-basement houses are springing up on every patch of suburban building land. The victory over the old type of basement tyranny is the victory of Abigail, and to her must be ascribed the credit. The unlucky owners of old-fashioned houses find more and more difficulty in letting them, and we do not withhold our sympathy from them, but from the health point of view the time has nearly arrived when a house will be considered in an insanitary condition when it can only afford domestic servants a few dark rooms below the ground level in which to spend their days and sometimes their nights.

#### "Paternal" Legislation.

THERE can be no doubt that the health and welfare of the people have been enormously improved by legislation of the kind usually styled "paternal" during the past sixty years, in spite of the fact that many laws have been found more or less impracticable, and others have been followed by injurious effects never contemplated by those who framed them. This latter fact is lucidly illustrated in a pamphlet on "Practical Eugenics," recently published by Professor Karl Pearson. Dr. Pearson expresses his opinion that the declining birth-rate is in some districts the direct result of the various Factory Acts passed during the last half century. His attention was first called to the matter by the extraordinary low birth-rate of Bradford. There, on the average, every married woman of child-bearing age has a child only once in about ten years, as against the rate of one in five years of 50 years ago. Formerly a child of six or eight years became a "pecuniary asset"; it was able to earn money and contribute towards the prosperity of the home; and by the number of the children that prosperity could usually be measured. Besides limiting the employment of children, Parliament has placed restrictions on the employment of women when near their confinement. Children thus penalise the parents, and the well-meant efforts to protect mothers and children tend towards abolition of children and motherhood.

Furthermore, in the old days parents were stimulated to take care of their children owing to their pecuniary value; they must be kept in health, because they lost their value when they broke down. Dr. Pearson thinks that, in every sense of the word, it would have paid the nation better to have devised a scheme for the endowment of parentage than to have established a system of old-age pensions, which, applied long after reproductive age, cannot possibly produce any permanent change of advantage to the race.

#### The Teaching of Therapeutics.

It is a common jest of the ungodly who scoff at the medical profession that, as a profession, we are—even as compared with other professions—hide-bound in our traditions. When one considers the place that the study of *materia medica* still takes in the medical curriculum, one is inclined to grant that there is some truth in the assertion. The subject is still taught on the same lines and with somewhat the same detail as in the days, centuries ago, when the physician gathered his herbs and prepared his galenicals. Yet, no one serious believes that it is part of the business of a medical man to know the appearance of crude drugs which he will never see, once his student days are over. Moreover, the importance given to drugs in the teaching of therapeutics is entirely exaggerated. In modern scientific medicine the place of drugs is growing less and less, and the importance of diet, of hygiene, and of vaccine therapy is increasing day by day. Yet, for all that the student usually learns in his systematic lectures on therapeutics, drugs might be the sole weapons in the armamentarium of the physician. It is difficult to over-estimate the vicious effects such teaching has on the work of the medical man and on the progress of science. We are glad, therefore, to find that among the teachers of the subject there is discontent, and particularly we welcome the paper read by Professor Dixon, of King's College, at Belfast, in which he quoted with approval Huxley's advice to abolish *materia medica* altogether from the medical course.

#### The Care of the Feeble-Minded.

THE administration of the Home Office lying mostly beyond the range and influence of party politics, it may be fairly hoped that the prospects of reform in the laws dealing with the feeble-minded are really as bright as was foreshadowed in Mr. Gladstone's reply to the deputation which waited upon him a few days ago. There prevail anomalies and deficiencies in the present system which certainly call for alteration without delay. There exist many classes of weak-minded people now outside the law who ought to be included in an amended lunacy law; whilst, as Mr. Gladstone admitted, there is urgent call for organisation and concentration of authorities in order to produce a uniform and complete system throughout the country. Then there is the question of the inebriate and the general question of criminality—the question of crime in relation to weak-mindedness. The Home Office authorities are evidently impressed with the supreme importance of the last-named subject, and Mr. Gladstone was able to promise that some steps towards reform would be taken on practical

lines. Finally, Mr. Gladstone affirmed that all were agreed that legislation was the only remedy, and pledged himself to push this forward. The Report of the Royal Commission on the care and control of the feeble-minded affords ample data and guidance for construction of new laws; the case for legislation is established; it is backed by the opinion of every responsible authority. For the sake of humanity, and for the sake of the national welfare, to which the present state of things is so hurtful, it is to be hoped that the projected new laws may soon find a place upon the Statute Book.

#### PERSONAL.

THE KING has consented to lay the foundation-stone of the extensions to the Norfolk and Norwich Hospital on October 25th. The occasion will be marked by the amalgamation of the Norfolk and Norwich Eye Hospital with the County Institution.

SIR JOHN TWEEDY, F.R.C.S., will deliver the address at the annual distribution of prizes to students at University College Hospital School on Friday, October 1st.

THE RIGHT HON. VISCOUNT RIDLEY, Chairman of Charing Cross Hospital, has consented to present the prizes at the opening of the Winter Session on October 4th to the students of the Medical School.

DR. BORDAS, Director of the Laboratories of the Ministry of France, will preside over the Second International Food Congress, to be held at Paris from October 17th to 24th.

LIEUT.-COL. DRURY, Indian Medical Service, has been appointed Principal of the Calcutta Medical College, and Lieut.-Col. Calvert, I.M.S., becomes a Professor, Calcutta Medical College, *vice* Lieut.-Col. Drury, promoted.

MAJOR T. H. M. CLARKE, C.M.S., D.S.O., Royal Army Medical Corps, serving at Plymouth, has been appointed Medical Inspector of Recruits, Southern Command, *vice* Lieut.-Col. G. G. Adams, R.A.M.C., whose period of service has expired.

ON the motion of Alderman Dr. King Kerr, Chairman of the Public Health Committee of the Dublin County Council, at a recent meeting, it was unanimously resolved to adopt Part I. of the Tuberculosis Prevention (Ireland) Act, 1908.

DR. HERINGHAM will preside at the St. Bartholomew's Hospital Old Students' Dinner, on October 1st. Tickets may be obtained of the Hon. Secretary, Mr. H. J. Waring.

DR. ARNOTT DICKSON, of Glencraig, was last week presented with a handsome gold watch and a gold fountain pen. The watch bore the following inscription:—"Presented to Dr. Arnett Dickson, in appreciation of his services, by the workmen and officials of the Glencraig Colliery and friends in Glencraig, on the occasion of his leaving the district. September, 1909."

THE number of medical men in the House of Commons has recently received an accession in the newly-elected member for West Clare, Mr. Arthur Lynch, who was described on his nomination paper as "physician and journalist." Mr. Lynch is a man of many parts—an engineer, a barrister, colonel in the Transvaal Army, journalist, author, physician. It will be remembered that he was tried for high treason a few years ago for having fought for the Boers in South Africa, and sentenced to death. The sentence was commuted, and he was released after some twelve months' imprisonment, later receiving a pardon. Since his release he has studied medicine at St. Mary's, and he recently took the Conjoint qualification.

# A CLINICAL LECTURE ON THE DIAGNOSIS OF PELVIC TUMOURS. (a)

By ARTHUR GILES, M.D., B.Sc., F.R.C.S.,

Surgeon to the Chelsea Hospital for Women; Gynaecologist to the Prince of Wales's General Hospital, Tottenham.

IN discussing the diagnosis of pelvic tumours, I shall follow the lines adopted in my monograph on "Gynaecological Diagnosis," and proceed from the known to the unknown. Thus I shall not describe to you in turn the symptoms and signs of fibroids, ovarian tumours, etc., but review the data that would be available when we are called upon to decide what is the matter with any particular patient, and note the signs and symptoms that would lead up to a diagnosis. The one feature that is common in all the cases now under consideration is the presence of a pelvic tumour, and I shall suppose that in the course of a gynaecological examination, for whatever purpose it is undertaken, some swelling is discovered in the pelvis other than the normal uterus and appendages, and the medical attendant wishes to decide what it is. The woman may have gone to him because she wishes to know why she does not have babies: there may be no symptoms, yet, on examining, he finds there is an abnormal swelling. In any case, we are taking as a starting-point the postulate that there is an abnormal swelling in the pelvis. My idea is to give you a sort of clue which you can take with you and trace out step by step what this particular swelling may be. I think the best plan will be for us to try and determine at the start whether the tumour is uterine or not. It is generally easy to tell that. Sometimes, however, it is not, and sometimes there is more than one tumour present; so that we at once get four groups of cases: I.—In the first group the tumour is evidently uterine. II.—In the second group we can be certain that the tumour is not uterine. III.—In the third group it is doubtful whether the tumour is uterine or not. IV.—In the fourth group there is more than one tumour. That at once clears the ground somewhat.

I.—We will begin with the supposition that we have determined that the tumour is uterine. We can tell that in various ways. For instance, we may be able to feel the ovaries and tubes independently of the swelling, or we may be able to satisfy ourselves there is no swelling in the pelvis corresponding to the uterus other than is supplied by the tumour; or we may find that any movement conveyed to the tumour by the hand examining the abdomen is at once conveyed to the cervix itself, the tumour and the cervix moving *en masse*. The next information that we shall have readily to hand, supposing we take our first group, is the history of menstruation. That will at once give us certain other indications to go upon.

(a) We will take a case where we may suppose there is amenorrhœa, and we will begin with a case in which the amenorrhœa has followed a period of normal menstruation. Our diagnosis is now three-fourths made. Amenorrhœa, following on normal menstruation, is due to pregnancy in 99 per cent. of cases. As we are satisfied that the tumour is uterine, if in addition there are symptoms of pregnancy, we may say it is a case of normal pregnancy. The amenorrhœa may have been followed by a period of irregular hæmorrhage, and we shall very likely find that the uterus, instead of presenting the usual elastic feel of a normal pregnancy, is rather harder and more boggy, and that the external os is partly dilated. In that case we shall say it is not a normal pregnancy, but probably a case of missed abortion—that is to say, when the hæmorrhage started the fœtus died, and the uterus should have got rid of it, but did not, and so it comes under the category of missed abortion. But the amenorrhœa may be of a different type, for the patient

may never have menstruated at all. It may be a primary amenorrhœa. In that case, supposing that we find that the external os is more or less obliterated, that there is, in fact, atresia, as is quite likely in such a case, and supposing there are no symptoms of pregnancy at all, we may fairly certainly conclude that this is a case of retention of menstruation due to atresia of the os, and we shall call it hæmatometra. It is a point to remember that after a patient has menstruated the external os may get obliterated as a result of disease, and hæmatometra may thus form in a secondary fashion. But that is too rare to be taken into practical account. I have only seen one such case, and probably most men do not see more than two or three in a lifetime.

In all these cases we have supposed that the uterus is in the normal position, and feels practically like a pregnant uterus, which hæmatometra may closely resemble. But we may find the uterus retroverted, and this gives us a further variety in this group of cases of amenorrhœa: with symptoms of pregnancy and a further history of bladder trouble, culminating in retention of urine, our diagnosis will be retroversion of the gravid uterus.

(b) If a patient has amenorrhœa and an enlarged uterus, it is practically certain to be one of those conditions I have mentioned. But we may find, in the cases under consideration, that, instead of there being amenorrhœa, menstruation has increased; there may be menorrhagia or metrorrhagia. When there is a definite increase in the size of the uterus, accompanied by menorrhagia over any considerable time, or accompanied by hæmorrhage in the intervals of menstruation, without any previous period of amenorrhœa, you may be quite certain that that uterus is the seat of a fibroid tumour, or of some modification of a fibroid, such as fibro-adenoma. It is usually impossible to distinguish between fibroid and fibro-adenoma, or, as it is sometimes called, diffuse adeno-myoma, until you open into the uterus. Though adeno-myoma is usually rather softer than true fibroid, the latter may be undergoing some degeneration, and will then feel like adeno-myoma.

(c) There is a third class, in which menstruation is not regularly increased, but there is irregular hæmorrhage. Supposing you have a case with a history of irregular hæmorrhage, pain in the pelvis, rise of temperature, and on examining you find that the uterus is very large, and in addition that there is a carcinoma of the cervix, your diagnosis is not quite complete when you have said it is a case of carcinoma of the cervix; because it is almost certain that in addition, with a large body of the uterus, if the enlargement gives a sense of fluctuation, you have to do with a case of pyometra—i.e., pus retained in the uterine cavity. Pyometra hardly ever occurs except in conjunction with carcinoma of the cervix. Carcinoma of the cervix by itself does not produce any material enlargement of the uterus. If there is any enlargement of the uterus in a case of carcinoma of the cervix, the enlargement is due to something else; it may be to pyometra, or to a conjunction of carcinoma with fibroid. By this means we shall practically have analysed all our cases of pelvic tumours which are definitely uterine.

II.—Our second group is that in which the tumour is definitely not uterine. And here again, having found the tumour, the first thing to inquire into is the menstrual history, which will at once give us some important clues.

(a) As before, we begin with the class where there

(a) Delivered at the Polyclinic, Charles Street, London, W.C., on Wednesday, June 23rd, 1909.

is amenorrhœa. That always suggests pregnancy, and if there is a tumour apart from the uterus, extrauterine pregnancy. The tumour may be either mobile or fixed. (1) Take first the case in which there is a mobile tumour, not uterine, associated with amenorrhœa. Of course, the uterus itself may be pregnant and there may be a tumour; but I am not considering that, because it would come under the last group, that of more than one swelling. If you get a case of a normal uterus with a mobile swelling on one side and amenorrhœa, you will almost always find that the amenorrhœa is of not more than two months' duration. You may diagnose this as unruptured tubal pregnancy. These cases which are diagnosed are few and far between, and the principal reason is that in such a case there is but little in the way of symptoms. The patient misses one or two periods, and, thinking she is pregnant, does not think it worth while to consult a doctor. And if she does go and ask him to attend her in seven months' time, he will not think it necessary then to examine her. So many of these cases pass unnoticed. But if you do examine such a case at this early stage, you can make this diagnosis with tolerable certainty. An unruptured tubal pregnancy will nearly always be laterally situated. Occasionally the tumour may be lying on the front, or towards the back of the uterus, but the lateral position is the more common.

(2) Then there is the case where the swelling is fixed. This fixed swelling may be either to one side of the uterus or behind it. If it is lateral and fixed, and there has been amenorrhœa, you will almost invariably find that there is, after the amenorrhœa, a period of slight hæmorrhage. You will say this is almost certainly a tubal pregnancy; and when it is fixed it means that rupture has taken place. After such rupture the tumour is never mobile. About ten or twelve years ago I saw a patient who gave a history of two months' amenorrhœa. She had a great deal of pain, referred to one side, and a little irregular bleeding; and on examining I felt, I thought, a swelling on one side of the cervix. But I did not feel clear enough about it to advise operation; I thought it better to wait. I tried to push up the swelling, and found that it moved a little. I saw the case again a fortnight later, and then the swelling was no longer lateral; it clearly formed part of the uterus, which was in a fairly good position. We diagnosed that it was pregnancy, with probable abortion, and she confirmed our diagnosis a fortnight later. If that case were to occur to me now—knowing more than I did then—I could not suppose that was a case of tubal pregnancy, because it was mobile. If it had been ruptured it would have been fixed. It could not have been tubal pregnancy unruptured because there was hæmorrhage, and it was that hæmorrhage which made me think it was tubal pregnancy.

The lateral tumour, which is fixed, is almost certainly in the broad ligament. The case is one of mesometric pregnancy. Of course, mesometric pregnancy may not be progressing as a pregnancy, because the fetus may die. But in either case it is conveniently so described. If, however, the tumour is posterior, you may describe it as hæmatocele due to a tubal pregnancy. That may be the result of a rupture of the tube, causing hæmorrhage into the peritoneal cavity, or a tubal abortion causing bleeding through the open fimbriated end of the tube. I do not think you could say before-hand which of the two it is.

(3) Take now the second class, in which menstruation is unaltered. How shall we divide these cases in which menstruation is not altered and there is a swelling in the pelvis? Perhaps the most convenient plan will be to divide them into two divisions: swellings which are mobile, and those which are fixed. (1) Take first the mobile ones, we find there are not a great many of them. There may be a small ovarian, which has a reasonable pedicle, and is able to move about, and it may be in front of the uterus, or behind, or at the side. In most cases a quite small one is more or less at the side, and as it enlarges it gets a little behind, and when it grows larger still and grows out of the pelvis, it gets on the top of the

uterus, pushes that down, and it lies in front or above the uterus. An exactly similar position may be occupied by a small pedunculated fibroid, which may be attached to the uterus behind, in front, or at the side; and the only way you can distinguish between pedunculated fibroid and ovarian is by the consistency. If you find the tumour is cystic and elastic, you may conclude it is a small ovarian. If it is very hard it is probably fibroid. I have put this among the cases of menstruation unaltered, because as a rule pedunculated fibroid does not affect menstruation at all. There may be, in addition to the tumour which you feel, a second one in the uterus, causing hæmorrhage; and if you do find that, it helps your diagnosis very much, because if there is hæmorrhage and a tumour outside, the probability is that there is one fibroid in the uterus and another you can feel outside it.

There are one or two other mobile swellings which you may find it necessary to differentiate from these. If the swelling is on the left side, and instead of being spherical and elastic or hard and spherical, it is somewhat irregular in outline and somewhat doughy in consistence, you may quite well be dealing with carcinoma involving the sigmoid or the rectum. Probably the carcinoma of the rectum, by the time you feel it, will almost always be fixed; but carcinoma of the sigmoid may have a considerable range of movement, and may come under the category of mobile swellings. That would be on the left side. Again, there may be a mobile swelling in front of the uterus, which you have to distinguish from other things, namely, foreign body in the bladder. It is possible to have such a tumour of the bladder itself, giving the impression of a mobile swelling in the utero-vesical pouch. If you had a doubt you would pass your bladder sound, and settle it in that way. Lastly, either in front or behind the uterus, you find an elongated swelling, sausage-shaped, not very resistant. You can depress it pretty easily, and next time you examine, it is gone. In such a case you may find you have to do with distended coils of bowel. When you are examining at the front or behind the uterus, it does not occur to you that there is bowel there which you can feel so plainly. If you can feel such tumour it is well not to give the opinion that the patient has a tumour until you have waited to see the effect of time and treatment.

(2) We will now pass on to the second division, that of fixed swellings. These present rather more variety than do the mobile ones. And it will be convenient to divide them into tumours which are lateral, those in front of the uterus, and those which are behind.

(i) The lateral ones are the most interesting and numerous. A lateral swelling in the pelvis, more or less fixed, may vary in consistence. If it is spherical and elastic you will almost certainly find that it is a cyst of some kind. It may be a broad ligament cyst. Or it may be an ovarian cyst which is impacted in the pelvis without any complication beyond the impaction. In both these cases the temperature will be normal. The patient may have some pain, and probably nothing else; you merely find a cystic swelling at the side of the uterus. There are other cases in which the pain may be very considerable, with more or less rise of temperature. If you find a fixed globular swelling at the side of the uterus, with a rise of temperature and pain in the pelvis, you can go further in your diagnosis, and say you have to do with an inflamed and adherent ovarian cyst. Supposing it has come on quite acutely, a sharp pain being experienced, whereas previously the patient was fairly well, and you find this tense and tender swelling quite fixed, you can diagnose ovarian cyst with twisted pedicle.

If, instead of the swelling being nicely rounded and globular, it is irregular, and perhaps ovoid in outline, it is probably dilated tubes; and they may be dilated either by clear fluid in the form of hydrosalpinx, or by pus in the form of chronic pyosalpinx. The difference between these and the ovarian tumours will be largely in the form of the swelling which is felt. If there is a temperature and a rather irregular swelling by the side of the uterus, tender on pressure,



it is very likely to be inflamed appendages. But you may find the swelling is quite hard, and if it is also rounded, it may be fibroid of the broad ligament. Further, there may be a hard swelling by the side of the uterus, but not so well defined, and if the patient has a temperature, and very likely rigors, you may diagnose it as pelvic cellulitis. A patient may have a considerable amount of pus in the broad ligament, namely, true pelvic abscess, and yet you may not be able to feel a softening of the abscess at all; it may feel hard and board-like, because the broad ligament may be so much thickened in the part which you can reach from the vagina that you cannot detect anything approaching fluctuation.

But the swelling may be neither cystic nor very hard; there may be no temperature. But you may find an irregular doughy kind of swelling, such as we mentioned just now in connection with carcinoma of the rectum. So if you are examining a patient and you find the left side somewhat irregular, and there is a fixed semi-solid tumour there, and you are not satisfied about its character, you will do wisely to put one finger into the rectum; it will save you many a retraction of opinion afterwards. Ovarian tumour is eminently operable and curable; but carcinoma is another thing, and it may not be amenable to operation at all.

(ii.) Now, suppose the swelling is a fixed one, in front of the uterus. That may be cystic, and then it cannot very well be anything but bladder. I put it down here so as to remind you of the advisability of passing a catheter in all cases of doubt; sometimes a little delay in passing it causes inconvenience. Some time ago I got a message from a friend in the country asking me to hold myself in readiness to do an operation for a large cyst, and two days later I heard that all was well, as a catheter had been passed, and about 80 ozs. of urine had been drawn off. But meantime the patient had been informed that there was a cyst there, and the subsequent explanation in such a case is always awkward.

Instead of being cystic, the tumour may be hard, and then it will almost certainly be a fibroid, developing in the anterior part, and pushing up the bladder; it will be a rounded, smooth swelling. But you may get a hard tumour of irregular outline, and in the latter case it is very apt to be carcinoma of the bladder.

I would like to digress here to tell you of a curious group of three cases which came to my notice. The first patient was passing faecal matter and pus by the bladder. We cystoscoped her, and saw a ragged, ulcerated surface in the bladder. There was a hard swelling to be felt a little to the left, and we concluded it was probably abscess in the pelvis, that communicated with both bowel and bladder. We opened her up, and found the sigmoid densely adherent to the bladder. It was true she had a small ovarian abscess on the left side, but it had no relation to the bladder at all. On separating the bowel from the bladder, the bowel felt very hard. She was a single woman, æt. 28, and as the bowel looked suspicious I thought I would resect it. It turned out to be carcinoma of the sigmoid, adherent to the bladder, and ulcerating into it. I did not know what it was at the time, or I should probably have removed part of the bladder wall, but now, fifteen months after the operation, she is all right.

The second patient was passing faecal matter by the bladder, and I opened her up and found carcinoma of the sigmoid. She was older than the last patient, and there was an extensive growth, adherent to and invading the base of the bladder, so one could not do anything for her. I take it such a state of matters is fairly rare. Yet five weeks after that I saw another case almost exactly similar, in which carcinoma of the sigmoid was continuous with a growth of the bladder which infiltrated the whole base and sides of it, so that it was like a cup.

(iii.) In the third group, the swelling is fixed and behind. And these swellings which are behind are very similar to those which are lateral; that is to say, you may have an inflamed ovarian behind, an

adherent impacted ovarian, an ovarian with twisted pedicle; there may be pyosalpinx, or there may be an impacted fibroid adherent to the back of the uterus; and, lastly, there may be intrapelvic abscess, causing an irregular boggy swelling behind the cervix. So these conditions behind are very like those at the side, and the same principles will hold fairly well with regard to them.

(c) For the sake of symmetry, we ought to include in our second group a third class, in which menstruation is increased. But when menstruation is increased and there is a swelling in the pelvis, that increase may have no significance in connection with the diagnosis of the swelling. But sometimes it has, and the pelvic swellings in which you find increase in menstruation are three: (1) fibroid, (2) pyosalpinx, (3) carcinoma of the ovary. In most cases there is no means of distinguishing between a solid ovarian and a pedunculated fibroid; but in both these cases the tumour will be more rounded and defined than is the case with pyosalpinx.

III.—There is a third group, in which it is doubtful whether the tumour is uterine or not. It is almost always possible to feel the cervix, and even if the cervix is drawn up behind the pubes, you can almost always tell its position. So, in a doubtful case, take the cervix as your starting-point, and consider whether the tumour is behind the cervix, by the side of it, or above it. If it is behind, consider how menstruation is. If there has been amenorrhœa, it must be one of two things—either retroversion of a gravid uterus or an extra-uterine pregnancy developed in the pouch of Douglas. If there has been no amenorrhœa, and you are satisfied it is not pregnancy, you pass the sound, when you can tell whether you are going into the tumour or not. In this way the case is transferred to one or other of our first two groups. In a doubtful case go first of all for the question of pregnancy. If the tumour is at the side of the uterus, ask whether it is pregnancy or not. If it is pregnancy, it must be extra-uterine. If there is no pregnancy and no amenorrhœa, pass the sound to clear the matter up.

IV.—I want to say a word about the last group—cases in which there is more than one tumour—because those are often very difficult cases. I will give you a list of the possibilities, and we can then consider what are the guiding principles.

If there are two or more swellings in the pelvis, one of them may be pregnancy and the other may be a fibroid, an ovarian, or an extra-uterine pregnancy. Of course, there may be pregnancy complicated by an appendix abscess, but in that case the two things would be pretty clear; there would be a history of the pregnancy and of an attack of appendicitis. But when a pregnancy is complicated by fibroid, it is difficult, as the fibroid should cause menorrhagia, but the super-vention of the pregnancy may cause amenorrhœa. With pregnancy there should be amenorrhœa, but if there is a fibroid there may be hæmorrhage. But if you find the tumour varies in consistency in different parts, you have to consider the possibility of there being a combination of the two. If the tumour is quite independent of the uterus and is cystic, probably it is ovarian. It is curious how often dermoids complicate pregnancy; they do so in a surprising number of cases.

With regard to intra-uterine and extra-uterine pregnancies, there are signs which may belong to either. Generally with intra-uterine pregnancy co-existing, you get no hæmorrhage from rupture of the tube; consequently you lose one of the chief signs of extra-uterine pregnancy. Practically your only guiding sign would be: supposing a patient with pregnancy were to develop the symptoms of intra-peritoneal rupture of a tube, with intra-peritoneal hæmorrhage and lateral pain, and you found that pregnancy was apparently not affected, you might diagnose pregnancy in association with ruptured pregnant tube. But if you are able to diagnose this, you may consider you are lucky in most cases, as well as skilful.

There may possibly be ovarian complicating fibroid tumours. When a number of hard swellings are felt, one probably diagnoses multiple fibroids; yet it may turn out that some of the swellings are ovarian in origin. Of course, with solid ovarian tumours the

mistake is very easily made, but even ovarian cysts may simulate fibroids.

In one such case that I came across there were fibroids and a suppurating ovarian cyst with carcinoma in its walls, and malignant deposits on the back of the uterus also. That is a kind of thing which no man could diagnose beforehand. There may be an ovarian with extra-uterine pregnancy, or with pus tubes; or there may be fibroid with extra-uterine pregnancy, or fibroid with pus tubes. The last combination is not very uncommon. When there are pus tubes with an ovarian cyst, the probability is that the pus tubes will be the predominant partner. When there are a fibroid and pus tubes, it will be the fibroid which will be the striking feature, and the pus tubes will only be discovered during the operation, unless there happens to be some rise of temperature at the same time. There may also be multiple fibroids, and there may be double ovarian tumours. And, lastly, there may be fibroid or ovarian, *plus* some malignant growth of the bowel or omentum. Broadly speaking, these things are not diagnosable, and there is not time to go into them in detail to-day. They are almost always discovered accidentally in the course of the operation.

The following synopsis will serve to illustrate the method that can be followed in arriving at a diagnosis. It does not, of course, embody all the data that have to be considered in a given case, nor is diagnosis quite such a simple matter as is here indicated; consequently, the synopsis must not be regarded as more than a guide to a method.

#### SYNOPSIS OF THE DIAGNOSIS OF PELVIC TUMOURS.

##### I.—The tumour is uterine.

- (A) There is amenorrhœa.
  - (1) The amenorrhœa follows normal menstruation.
    - (a) Uterus in normal position, elastic, large—normal pregnancy.
    - (b) Uterus retroverted, elastic, large—retroversion of the gravid uterus.
  - (2) The amenorrhœa was followed by hæmorrhage.
    - (a) Uterus in normal position, doughy, os patulous—threatened abortion.
  - (3) The amenorrhœa is primary.
    - (a) Uterus in normal position, atresia of the os externum—hæmatometra (retained menses).
- (B) There is menorrhagia or metrorrhagia.
  - (1) The uterus is large, very hard—uterine fibroid.
  - (2) The uterus is large, soft, with carcinoma of the cervix—(?) pyometra due to carcinoma.

##### II.—The tumour is not uterine.

- (A) There is amenorrhœa.
  - (1) The tumour is mobile, lateral, or in front of the uterus—unruptured tubal pregnancy.
  - (2) The tumour is fixed, lateral, or behind the uterus—ruptured tubal pregnancy.
- (B) Menstruation is unaltered.
  - (1) The tumour is mobile.
    - (a) The tumour is cystic, lateral (? in front or behind)—small ovarian cyst.
    - (b) The tumour is hard, in front behind or lateral—pedunculated uterine fibroid.
    - (c) The tumour is firm or doughy, on left side—carcinoma of the sigmoid.
    - (d) The tumour is in front, firm, with *ballotement*—foreign body in the bladder.
    - (e) The tumour is in front or behind, vague shifting—distended coils of bowel.
  - (2) The tumour is fixed.
    - (i.) The tumour is lateral.
      - (a) The tumour is cystic, globular, temperature normal—broad ligament cyst; impacted ovarian cyst.
      - (b) Tumour cystic, globular; temperature raised—inflamed ovarian cyst; ovarian cyst with twisted pedicle.
      - (c) Tumour cystic or firm, ovoid or irregular—hydrosalpinx; chronic pyosalpinx.
      - (d) Tumour hard, rounded; temperature normal—fibroid in the broad ligament.
      - (e) Tumour hard, board-like, vaginal vault involved—pelvic cellulitis or abscess.

(f) Tumour doughy or pitting, irregular, on left side—carcinoma of the rectum; fæcal matter in the rectum.

(ii.) The tumour is in front.

(a) Tumour cystic, disappearing with the catheter—distended bladder.

(b) Tumour hard, rounded—uterine sub-peritoneal fibroid.

(c) Tumour firm, irregular; hæmaturia—carcinoma of the bladder.

(iii.) The tumour is behind.

(a) }  
(b) } As with lateral tumours.  
(c) }

(d) Tumour hard, rounded—impacted fibroid sub-peritoneal.

(e) Tumour not well circumscribed; temperature raised—intra-pelvic abscess.

(C) There is menorrhagia.

(1) Tumour hard, rounded, lateral or behind; temperature normal—impacted fibroid and fibroid in uterus.

(2) Tumour hard, rounded, or irregular; wasting; hydro-peritoneum—ovarian carcinoma.

(3) Tumour firm, irregular, or ovoid; temperature raised—pyosalpinx.

##### III.—It is uncertain whether the tumour is uterine or not.

(a) There is amenorrhœa.

(1) The tumour is above the cervix—pregnancy uterine.

(2) The tumour is behind or to the side of the cervix.

(a) The tumour is mobile—retroversion of the gravid uterus.

(b) The tumour is fixed—ruptured tubal pregnancy.

(b) Menstruation is unaltered.

Pass the uterine sound, and see whether it goes into the tumour or not; this will at once enable you to assign the tumour to Group I. or II.

##### IV.—There are two or more tumours.

No definite rules can be laid down. The possibilities are:—

Pregnancy *plus* ovarian cyst.

Pregnancy *plus* fibroid.

Pregnancy *plus* pus-tubes.

Pregnancy *plus* tubal pregnancy.

Ovarian cyst *plus* fibroid.

Ovarian cyst *plus* pus-tubes.

Ovarian cyst *plus* tubal pregnancy.

Fibroid *plus* pus-tubes.

Fibroid *plus* tubal pregnancy.

Multiple fibroids.

Double ovarian tumour.

Double uterus.

Uterine or ovarian tumour *plus* malignant tumour elsewhere.

**NOTE.**—A Clinical Lecture by a well-known teacher appears in each number of this journal. The lecture for next week will be by Drs. Maurice Loeper, M.D., and Xavier Gouraud, M.D. Subject: "Decalcified Dietary in Arterial Atheroma."

An outbreak of beri-beri has occurred on board the Brazilian cruiser *Carroza*, which has arrived in the Tyne bringing men for the new battleship being built there for the Brazilian Government. It was found necessary for the Tyne Port Sanitary Authority to remove five men to the floating hospital suffering from the disease, and one of them, a young man of 22, has died.

An alarming outbreak of illness in Bristol was reported, on the 7th inst., by the medical officer, Dr. Davies, at a meeting of the Health Committee. Out of sixty-nine persons who had eaten corned beef and pork bought from a local tradesman sixty-one were taken ill, more or less seriously, but no fatal cases had occurred.

## ORIGINAL PAPERS.

# CONGENITAL HEART AFFECTIONS, ESPECIALLY IN RELATION TO THE DIAGNOSIS OF THE VARIOUS MALFORMATIONS. (a)

By GEORGE CARPENTER, M.D.,

Physician, Queen's Hospital for Children; Vice-President, Royal Society of Medicine; Membre Correspondant de Pédiatrie de Paris.

THE coincidence of congenital malformations of the heart with malformations in other regions of the body is a matter of everyday experience. Heart malformations are not always accompanied by other congenital bodily defects, but they are sometimes found in association with such diverse structural faults as hare-lip, cleft palate, ill-developed teeth, supernumerary auricles, and supernumerary nipples, polydactylism, syndactylism, webbed fingers, steeple-skull, defects in the abdominal wall, herniæ, ill-developed and absent rib cartilages, undescended testis, atresia of the anus and rectum, postanal dimple, congenital opacity of the cornea, coloboma iris, congenital defects of the orbits, congenital ptosis, not to mention many other congenital irregularities of development which are obvious to the naked eye—cretinism, for instance—which sometimes bear them company.

Of internal mal-developments which are not obvious on inspection there are numerous illustrations, such as unilateral kidney, horse-shoe kidney, double ureters, absent spleen, supernumerary spleens, malpositions of the intestines, atrophic patches in the choroid, transposition of the viscera, four lobes to the lungs, and an accessory bronchus amongst other anomalies.

Deaf-mutism is sometimes an associated condition, and the coincidence of Mongolian imbecility with congenital heart malformations has been variously recorded by cases and morbid specimens.

That congenital malformations of the heart are sometimes hereditary has been proved by several observers—Ferrannini, De la Camp, Orth, and others—who have recorded examples of this as a family complaint. Among my own series I have illustrations of two cases in the children of one family, and of three cases in the children of the other. Among the latter, one, an example of steeple skull came to autopsy, and the heart, like the child, was fantastic, and could not be placed in any usual anatomical grouping. The foramen ovale was widely open and divided into two by a bridge of tissue. Behind this was another hole in the septum, and above this hole the septum was minutely fenestrated. The right auricular appendix was very large and muscular,  $1\frac{1}{2}$  in. long by  $\frac{3}{4}$  in. broad at its broadest part, and it and its corresponding auricle made an elongated chamber about 2 in. long and a little more than  $\frac{1}{2}$  in. broad behind. The tricuspid orifice was small,  $\frac{3}{16}$  in. only, with natural though small valves, and passed into the cavity of the right ventricle, which was so small that it would only admit a pea. The pulmonary artery was smaller than the aorta, and was situated directly over the ventricular cavity. The thickness of the ventricular wall was  $\frac{3}{16}$  in., and at its upper and outer part was a distinct muscular hump, on which the enlarged auricular appendix rested. The left auricle was more muscular than natural, and the left ventricle was enormously hypertrophied, its walls measuring  $\frac{7}{16}$  in. thick, which so encroached on its cavity that its capacity appeared to be even less than that of the right. The mitral orifice, which was larger than the tricuspid, was  $\frac{5}{16}$  in. across, and its valves were natural. The aorta, which had a right-angled bend on it like that of a ventilating shaft on a steamer, was thick walled; its valves were normal. The greater part of the heart was made up of the left ventricle and the right auricle and appendix. There was no bruit during life.

Since heart malformations have been shown to be a family complaint in some instances, it must be

admitted that inherited as well as acquired defects in the sperm and germ-cells of the parents are of some importance in the production of malformations of the heart, as in other regions, for erratic tendencies to produce deformities when once acquired are handed down from parents to children.

Inquiry has been directed to the state of the mother's health, both bodily and mental, during the pregnancy to serve as an explanation for the production of congenital cardiac defects. Maternal impressions and trivial injuries have been, and are still frequently, advanced to explain away congenital anomalies of the heart and elsewhere, because mothers have been brought up in such beliefs, and readily recall all sorts of strange sights and slight mishaps incident to the pregnancy, if it be the misfortune of the offspring to present any abnormalities of mind or body. When it is realised that the heart is perfectly formed, though in miniature, in seven weeks' time from the date of conception, the various examples of congenital heart disease that have been recorded by J. Lewis Smith and others, following upon frights and so on during the last two or three months of pregnancy, these psychical disturbances cannot possibly have had any effect upon the foetal heart. Maternal impressions must, I think, be thrown into the waste-heap of other ill-founded superstitions.

But it is otherwise when the bodily health of the mother becomes the subject of scrutiny. In regard to definite illnesses affecting the mother during the pregnancy, it is surprising how few mothers give a history of suffering any illness during that period. In 100 examples of my own of congenital malformation of the heart, in a large number the parents and their families were apparently free from rheumatic taint, as no history of that complaint was admitted. In a few instances the parents had suffered from rheumatic fever, but in no case was there any evidence in this series of maternal rheumatic fever taking place during pregnancy. Therefore the commonest cause for endocarditis in children was conspicuous by its inconspicuousness in my pre-natal cases. But Theodore Fisher (1) narrates that in a case of foetal endocarditis, three months before the birth of the infant the mother suffered from severe pain in the left knee, and for several days she could only get about the house with difficulty. This fact is of importance, because it shows that rheumatic fever in the mother is not essential to the production of foetal endocarditis, and it suggests that those painful bodily ailments in the mother during the carrying, which are grouped under the generic term "rheumatic," may be the cause of foetal endocarditis in the infant.

Endocarditis in the foetus has been attributed to typhoid fever, influenza, pneumonia, and other maternal infections. But these diseases arising during the pregnancy are infrequent in comparison with the number of cases of foetal endocarditis for which a ready explanation is not forthcoming.

Syphilis, of course, is naturally uppermost in the mind as an explanation for congenital affections of the heart, but it does not appear to be a very important factor in the creation of cardiac abnormalities. The number of congenital syphilitics that I have seen with congenital heart malformations has been very few; and the number of my cases of congenital heart disease that could be ascribed to syphilis was trifling—only three. Bearing upon this question, it may be noted that Hochsinger found congenital heart disease only 7 times in 500 cases of congenital syphilis.

There is a strong presumptive evidence that alcohol has a decided influence in the production of deformities, and clinical experiences are borne out by experimental observations on the lower animals. In Hodge's experiments, where alcohol was administered to two parent dogs, of twenty-four puppies born, many were deformed or dead. Féré, also, in controlled experiments on chicken's eggs exposed to the vapour of alcohol, found that a number of the chicks were found dead or stillborn, and displayed various deformities.

That immoderate drug-taking may be a cause for congenital abnormalities I have an example in the person of a lady who was a confirmed morphino-

(a) Abstract of the Wightman Lecture for 1909, delivered at the Royal Society of Medicine, June 24th, 1909.

maniac at the conception and during the pregnancy, and with the result that an imbecile child was born to her.

Tuberculosis in the parents has been credited with the production of hypoplasia of the aorta.

Several examples of foetal endocarditis have been shown to the Society for the Study of Disease in Children, or have been spoken of at its meetings. Theodore Fisher's case (2) of aortic disease occurred in a child, aged 4 months. The flaps of the semilunar valves were much thickened and adherent. Some thickening of the flaps of the mitral valve and its chordæ tendinæ was also present. G. W. Nash, of Bedford, at the same meeting, narrated a case of a child who died, aged 6 months, from mitral stenosis. The mitral valve was puckered and diminished. This he attributed to sepsis from defective drainage, as the mother developed pneumonia from that cause after the confinement. In a case reported by the late A. E. Sansom (3) in a baby, aged 2 months, there was a ring of granulations of endocarditis, and the mitral valve was thickened. The changes were of the rheumatic character, but the mother, so he stated, had never suffered from rheumatism, and he went on to say that endocarditis in intra-uterine life was so rare that it was desirable that every case should be reported. At a later meeting during the same session, Fisher (4) showed the heart of an infant, aged 4 months, in which the aortic and pulmonary valves displayed large organised vegetations. There was an intra-pericardial septal defect between the pulmonary artery and aorta, which extended downwards into the upper part of the septum ventriculorum. The pulmonary artery had two valves, and the cardiac defects were associated with somatic defects in the shape of a hare-lip and the rectum and vagina sharing a common aperture. Fisher attributed the endocarditis to defective house drains during the pregnancy. In Ayrolle's case (5) there was marked stenosis of the mitral valve, on which appeared numerous endocarditic vegetations. The infant died ten days after its birth. In a case recorded by Cotton (6), granulations were present both on the mitral and on the cusps of the aortic valve.

Planchu and Gardère (7) have recently recorded a case of endocarditis of the pulmonary artery in an infant, aged 6 weeks. The artery was bivalved, the lower surface of the cusps being rugose and showing numerous vegetations and ulcerations. The cardiac septa were so defective that the organ was practically one of two chambers. The great vessels were transposed, and the pulmonary artery was very narrow, and would only admit a small sound. There were associated visceral defects. In the heart of an infant, aged 25 days, recently exhibited by André Moussous, (8) the mitral valve showed signs of recent endocarditis. The orifice of the pulmonary artery was obliterated by a membranous arched diaphragm produced by the coalescence of the sigmoid valves. Above the tricuspid in the cavity of the auricle there was a pre-orificial narrowing in the shape of a rigid ring hardly admitting a goose-quill. The foramen ovale valve had a fenestrated appearance.

Foetal heart murmurs have been recorded by various writers. Tricuspid regurgitation has been detected *in utero* by Peter (9) who heard a systolic bruit replacing the first sounds of the heart. The child was stillborn. The tricuspid valve was covered with vegetations and tied down by shortened chordæ tendinæ. Hochsinger (10) quotes two cases, those of Barth and Hennig. In the former the child was also stillborn, and there was endocarditis of the tricuspid valve. In Hennig's case a double murmur was due to endocarditis of the aortic valves. In Christopher's case, reported to the American Pediatric Society, the aortic and tricuspid valves showed verrucose thickening, and the pulmonary artery took origin from the aorta. In Wetherill's case (11) the murmur persisted after birth, and was attributed to stenosis of the pulmonary artery, while in Hall's case (12) the bruit disappeared and was ascribed to patent ductus arteriosus, which became obliterated.

In the production, therefore, of congenital affections of the heart, two distinct processes can be seen in action—viz., development disturbance and inflamma-

tion. Both can operate without the other, and both are frequently combined. Those mal-influences, inherited and acquired, which preside over the sperm and germ-cells, have been passed in review, as also the causes of foetal endocarditis. The results of foetal endocarditis are seen in the shape of sclerotic valves, and on these valves it is not uncommon to find recent endocarditic vegetations. It also frequently happens that in association with congenital developmental anomalies the mitral and tricuspid valves are found to be somewhat thickened and crumpled at the edges, though perfectly efficient, suggesting that they have undergone a mild endocarditis during foetal life. It is in stenosis of the pulmonary artery that valvulitis and anomaly are so frequently combined. The points at issue are these: Are the patent septum ventriculorum and the atrophied pulmonary artery the result of increased blood-pressure in the right ventricle and starvation of the artery—that is, purely mechanical, or are the defects in the artery and the septum ventriculorum of developmental origin, and the endocarditis of the pulmonary valve an indication of its increased liability to attack by reason of developmental anomaly?

#### MORBUS CÆRULEUS.

*Morbus cæruleus* and congenital malformations of the heart have been looked upon as synonyms, but without reason, for children with severe congenital morbus cordis are frequently not blue, even when excited or crying. Many verified cases of congenital morbus cordis have been recorded where cyanosis was not a symptom during life. On the other hand, chronic lung (13) disease may be associated with extreme and chronic cyanosis, a characteristic example of which I exhibited to the Society for the Study of Disease in Children in 1906.

Some children with congenital morbus cordis are fresh-coloured. Others are strikingly pale. In some the lips are dark crimson, perhaps inclined to blueness rather than redness, or to turn lilac on crying. Or the complexion may be quite good and only the fingers dusky and cold-looking. The majority, however, are cyanosed more or less, and all gradations of cyanosis may be noticed, from that of a dark rubicund face with similar coloured ears and reddened finger and toe-tips, or a state of rather dusky-blue lips and cheeks and tongue and a similar condition of the extremities, to one where the face is plum-coloured, the conjunctivæ suffused, the buccal mucous membrane and tongue the colour of a slate, and the body generally dusky. In the majority of those who are blue the cyanosis dates from birth, but in others the children show no signs of blueness until after an attack of one of the exanthems, or following bronchitis or broncho-pneumonia, with or without whooping-cough.

Increase of cyanosis in those already blue and of paroxysmal onset is sometimes a symptom. In one cyanosed infant of mine, aged 2 months, who developed paroxysmal cyanosis, it was associated with a loud systolic bruit audible all over the front and back of the chest, and most marked at the second right cartilage. In another infant, aged 1 month, the only lesion that I could find after death was a patent foramen ovale. During the attacks that I witnessed in these infants the pulse, which was at first rapid, became gradually and quickly slower, and the breathing, which had been accelerated, ceased, and the infant remained for several minutes in a state of complete apnoea, during which time the cyanosis became extreme in the face and lips and tongue, and on the body and limbs. The conjunctivæ were insensitive and the pupils slightly contracted. If left undisturbed after some four or five minutes the infant gasped, the breathing recommenced, the colour returned and the eyes were opened, only to be followed in about half-an-hour by a recurrence of the same symptoms. Attacks such as these suggest to my mind a central origin, possibly of the medulla, for they bear some resemblance to attacks of unexpected cyanosis and apnoea which sometimes take place during the course of tuberculous meningitis, and with a suddenly fatal result. Such patients can certainly be temporarily revived, and perhaps on several occasions, if their

paroxysms of cyanosis are treated by artificial respiration. Morrow (14) has described recurrent cyanosis associated with very shallow respiration in two infants. One child, at the time of the report, was living and well. The other, a premature infant, died of asthenia, but there was no post-mortem. Morrow quotes Holt as having described similar symptoms in infants in whom atelectasis was found at autopsy.

Leconte (15) has reported two examples of paroxysmal cyanosis in children of three-and-a-half and four-and-a-half years old, which appeared for the first time in the first case a month previous and in the second child at two years of age.

Variot, under the term "congenital intermittent cyanosis," has drawn attention to the onset of cyanosis under exciting conditions, energetic movements and forced expiration.

Cyanosis becomes aggravated when dilatation of the right ventricle takes place, and the veins of the body become overcharged with blood. Microscopical examination of the organs (16) shows extreme capillary dilatation, with thickening and a tendency to fibrillation, as also venous engorgement and thickening in the brain, kidney, liver, heart, and elsewhere. I examined many microscopic sections of the skin of the patient, some twenty years ago, from whom this description of the capillaries is taken, but I found no capillary dilatations there. Hochsinger (17) states that the skin capillaries are dilated and tortuous in these cases, especially in the peripheral parts of the body. So wide and so tortuous were the vessels in the case I examined, that while, for instance, in the kidney the afferent arteries of the Malpighian corpuscles admitted but two or three red corpuscles abreast, the enormously dilated afferent veins contained seven or eight more. Loutaud states that the veins are not only dilated, but have hypertrophied muscular walls. The infrequency of general oedema in congenital cyanosis in children has been ascribed to this hypertrophy. But this absence of oedema occurs in acquired heart disease in children, and is not peculiar to congenital heart disease, and I have also met with several examples of oedema in the last stages of congenital heart disease in spite of these structural alterations in the veins and capillaries.

By far the most common malformations of the heart in association with cyanosis are those cases where the pulmonary artery or the conus are either absent, rudimentary or constricted. Next in frequency in the list of malformations, though only to about one-seventh of their number, is transposition of the pulmonary artery and aorta. Apart from these mal-developments, which form the bulk of congenital cardiac anomalies, the malformations which give rise to cyanosis are numerous and various.

Various views have been and are still held as to the causation of cyanosis, the criticism that I have to make about them being that it is sought to explain all cases of cyanosis by one theory, whereas the cause is often complex and differs in different cases.

The oldest theory, that of venous stasis, is that of Morgagni, which has numerous adherents. Another view is that cyanosis is due to the admixture of venous and arterial blood, an explanation which has been supported by Meckel and others. Alexander Morison (18) who critically examined some seventy-five cases of congenital heart disease, came to the conclusion that "the main, though not the only factor in the production of cyanosis is the inadequate aid afforded to the circulation by diminished lung functions."

In regard to the second theory, the admixture of venous and arterial bloods, the mingling of these bloods may be most free, and yet no cyanosis be produced. In Breschet's famous case the left arm was supplied by the pulmonary artery, the corresponding subclavian artery arising from it, but the limb was not cyanosed. Further lung functions may also be considerably encroached upon in a case where the mingling of blood is free to take place, and yet no cyanosis appears (19). In a child, aged 9 months, under my care, the right and left auricles practically formed one large chamber, and a patent ductus arteriosus in great measure supplied the descending aorta, yet the addition of extensive

pneumonic consolidation of the lung was not sufficient to curtail its oxygenating functions, for the infant was at no time cyanosed. The parts of the lungs still in action were perfectly healthy.

In another infant of mine, aged 5 months, whose case I have not published before, with transposition of the pulmonary artery and aorta, and a large patent ductus arteriosus, there were the following additional anomalies: A single auricle, with two appendices and a rudimentary membranous septum. There was no trace of a tricuspid valve. The right ventricle was rudimentary, and there was a perforate septum ventriculorum, the size of a crow-quill, leading into it and situated underneath the pulmonary valves. The lungs were quite healthy and pink. The lungs sometimes show an appreciable amount of atelectasis in some infants suffering from congenital malformation of the heart and without the production of cyanosis.

In many cases the explanation is invited, not that the lungs cannot oxygenate properly, but that they are prevented from dealing with a sufficient proportion of the total quantity of venous blood throughout the body by reason of various defects in the pulmonary region, perhaps combined with weakness of the heart muscle.

Cyanosis, therefore, appears to depend in some cases not upon defective aëration from defects in the lungs, but to be due to the conformation of the heart, which by reason of faulty construction and physical weakness is placed at a mechanical disadvantage, and is not adapted to deliver a sufficient quantity of venous blood to the lungs to be aërated.

But this will not explain all cases, for in some the lungs are not healthy and display considerable microscopical alterations. So wide and so tortuous were the thickened lung capillaries in the case of atresia of the pulmonary artery I examined, that those in the alveoli admitted six or more red corpuscles abreast. Changes such as these, permeating as they do the whole of the lung structure, are not conducive to proper aëration. It would appear, then, that diffuse and not localised structural alterations of the lung tissues are favourable to the production of cyanosis. This condition of the lungs alone appears to be sufficient to explain the occurrence of cyanosis in bronchiectasis and chronic emphysema. In the former there is great thickening and dilatation of the alveolar capillaries, and in both diseases there is considerable destruction of them.

Here, then, are two factors in operation—the difficulty of getting the blood to the lungs to be aërated, and the difficulty of aërating the blood when it arrives there, should it so happen that the lungs are not in a position to undertake the operation by reason of their structural defects.

Systemic venous congestion complicates matters; it does not produce them, for it is possible to have a considerable amount of cyanosis without venous congestion. When venous congestion takes place, additional factors come into play which increase the cyanosis, and these are: (a) the formation of enlarged veins and tortuous capillaries throughout the body, and (b) increased viscosity of the blood leading to further retardation of its flow.

Cyanosis, I take it, is due to deficient oxygenation from whatever cause arising, and not necessarily to impaired lung functions.

The explanation for the tardy onset of cyanosis and its origin in sequence to a diffuse inflammation of the lungs, such as broncho-pneumonia, may probably be found in some cases in widespread alterations in the alveolar capillaries. What is required is that attention shall be paid to the lungs of all children dying from congenital morbus cordis. I have examined them microscopically in a few cases, but with negative findings.

In other children perhaps the initial breakdown is in the muscle of the right heart.

#### CLUBBING OF THE FINGERS AND TOES AND OSTEO-ARTHRITIS.

Clubbing of the fingers and toes in congenital heart disease, the so-called Hippocratic fingers, depends almost entirely on congestive swelling and thickening of the soft parts of the terminal phalanges. The con-



nective tissue is increased, and the capillaries are enlarged and increased in number.

The finger-tips are broadened and the nails cyanosed, a different appearance to that shown in chronic osteo-arthropathy, where the nail is domed like a watch glass, curls over the finger-tip, and bears a striking resemblance to a parrot's beak, and is combined with osteo-periostitis of the terminal phalanx. The finger looks like a drumstick, and the nail is pink coloured.

There appears to be two varieties of clubbed fingers; in one there is osteo-periostitis of the terminal phalanges, but in the other this has not yet been demonstrated. Whether there are really two varieties of clubbed fingers, or whether the conditions are different stages of the same process, has not yet been settled.

Sternberg (20) regards the Hippocratic type of clubbed fingers as the commencement of the process, and this is Walter's (21) opinion, who thinks the two conditions are closely allied. He also points out that in the majority of cases of osteo-arthropathy defective blood aëration has been a feature of the case.

Bamberger's and Marie's views are that the bone changes are due to the absorption of poisons generated at the seat of the disease, wherever that may be situated, and it has been shown that about one quarter of the cases have arisen from a variety of affections other than those of the lungs. But these views omit to take into consideration the influence of congestion in the production of the enlargement of the soft parts, which certainly is an important cause in congenital heart malformation, and may be contributory in chronic lung disease.

The toxic effects, however, of the cyanosis in congenital heart disease cannot be overlooked, because clubbing is sometimes seen in these cases without much evidence of congestion.

Béclère (22) looks upon clubbing and osteo-arthropathy as due to congestion and toxæmia. Both clubbing and osteo-periostitis may be confined to one limb, and such conditions have been brought about by the pressure of an aortic aneurysm obstructing its circulation. The explanation advanced for the clubbing and osteo-periostitis is that toxic substances generated at the extremity of the affected limb are retained in the tissues by reason of the venous obstruction.

The youngest child among my cases in which clubbing was obvious was aged 2½ years. It was also stated to be present in one aged 7 months, in whom cyanosis was reported to be slight, but the physical signs were in favour of pulmonary stenosis. Common as is this clubbing of the fingers and toes in congenital heart disease, nevertheless it is a feature of this disease which very often is wanting. It is in pulmonary atresia and stenosis that clubbing most commonly arises, and it is in these conditions that congestion is most frequently observed.

Osteo-arthropathy of the Marie and Bamberger type, as osteo-periostitis of the distal extremities of the long bones as the seat of election with thickening of the carpal and tarsal bones and bulbous enlargement of the terminal phalangeal bones associated with parrot-beak-like nail changes and fingers of drumstick-like appearance is most rare in children. The number of cases reported can be counted on the fingers.

Those cases that have been recorded by Royal Whitman, Davis and Gillet have been associated with chronic lung diseases. Bamberger's case was aged 7 years, and suffered from pulmonary stenosis, congenital cyanosis, and a tuberculous lung. Thorburn's case had mitral disease only. A few cases in association with chronic lung disease have been recorded by Moussous, Gillet, Morzard, Marfan and Miller, in which the characteristic beak-like finger-nails occurring with osteo-periostitis of the terminal phalanges were the sole changes. D. F. M. Miller (23) provides a picture and a radiogram of a child, æt. 8, and contrasts pictures of the fingers in the case with that of a case of congenital heart disease in a child, æt. 7.

Of all the cases recorded that of Royal Whitman (24), in a girl, æt. 8, was the most extensive. There was a deposit of new periosteal bone upon the shafts of the phalanges, upon the metacarpal and metatarsal bones, and upon the lower third of the bones of the lower arm and leg. The knees and ankles and wrists

were enlarged from thickening of the capsules and the soft parts and effusion into the joints. Under the section dealing with the blood changes I have drawn attention to a case of my own in a child, æt. 3 9-12, with cirrhosis of the lung and bronchiectasis where the phalanges and metacarpal bones were thickened.

Cases have been recorded by Weill and Mouriquand (25) and by Variot in congenital heart disease in which to the naked eye the appearances of the finger-tips and toes, the wrists and the insteps at once suggested pulmonary osteo-arthropathy, but when radiograms were made it was found that only the soft parts were involved.

A case of osteo-arthropathy occurring in congenital heart disease in a woman, æt. 21, has been recorded by Batty Shaw and R. Higham Cooper (26). Clubbing of the fingers and toes and cyanosis were well marked, and there was a systolic murmur best heard over the third left interspace. There was no bony increase in the terminal phalanges of the fingers. The lower ends of the tibiae and fibulae were thickened. The bones of the forearms and wrists were slightly swollen, and also the shafts of the metacarpal and phalangeal bones. The osseous index for tubercle was normal.

#### OPHTHALMOSCOPIC APPEARANCES.

*Ophthalmoscopic examination* in cases of marked congestion reveals tortuous retinal blood-vessels of which the veins are very large. The blood in the arteries looks decidedly venous, though they are not quite so dark coloured as the veins. The red reflex, which is of cyanosed appearance, often appears to start from the physiological pit, and the number of vessels on the face of the disc appears to be greatly increased. In children where the cyanosis amounts to but little more than a ruddy bucolic appearance a want of the usual colour contrast between the arteries and veins is quite noticeable. The retinal blood-vessels early display evidences of congestion by enlargement and tortuosity of both arteries and veins. If there be considerable cyanosis retinæ, as sometimes is the case, without the associated appearance of curly retinal vessels, such an ophthalmoscopic finding, although not proof that there is no narrowing of the pulmonary region, nevertheless suggests that the pulmonary tract is either not involved or that right-sided muscular compensation is sufficient to overcome the obstruction.

#### BLOOD CHANGES.

*Blood changes* such as polycythæmia, macrocythæmia, and increased viscosity along with a by no means invariable increase in the hæmoglobin are not uncommon. In one blue child under my care, æt. 2½, with clubbed fingers and toes (27), who had been blue since birth, there was a blood-count of 7,880,000 per c.mm., and the hæmoglobin was 122 per cent. That is the largest number of red cells that I have met with in congenital heart disease. The heart was large, the interventricular and auricular septa defective, and the aorta rose from both ventricles. Hypoplasia of the pulmonary artery and its branches was a marked feature starting at the orifice.

In Planchu and Gardère's (28) infant, a child, aged 6 weeks, in whom cyanosis was slight, but worse on crying, the polycythæmia amounted to 9,000,000 per c.mm. This was with a heart of practically two cavities. Bach (29), in a child, aged 7 weeks, found no less than 11,400,000 per c.mm. There was atresia of the pulmonary artery, a patent ductus arteriosus, cicatricial occlusion of the tricuspid valve, and a rudimentary right ventricle.

Many of the children under my care with polycythæmia have shown a deficiency in the hæmoglobin rather than an increase. In a blue infant, æt. 1, with clubbed fingers and toes and lips, and finger- and toe-tips of purple hue, the blood-count amounted to 5,400,000 per c.mm. red, with a hæmoglobin percentage of 55 only. In an infant with intermittent cyanosis, Variot found intermittent polycythæmia. Weil (30) has shown in two children with morbus cereuleus and congenital morbus cordis increase in the red bone-marrow, and his observations have been confirmed. This increase of red blood-corpuscle producing areas must be viewed as compensatory to the



state of chronic suffocation, which is the normal condition of these patients. Parkes Weber (31) when recently reporting a case of congenital heart disease with polycythæmia, has called attention to the observations by Lorrain Smith and H. L. McKisack on a boy, æt. 12, with chronic cyanosis, who demonstrated not only a relative polycythæmia, but also that the total amount of blood in the body was far beyond the normal standard—nearly double. In Weber's case, a youth, æt. 22, compensatory polycythæmia was extreme, the blood-count amounting to 10,300,000 per c.mm.

The most intense polycythæmia that I have met with in a child occurred in a case (32) of cirrhosis and bronchiectasis of the lung in a boy, æt. 3 9/12. He was very blue, clubbing of the fingers and toes was a marked feature, and the phalanges of the hands and the metacarpal bones appeared to be thickened. (33) There was extension of the cardiac dulness to the right. A blood-count gave 8,270,000 red corpuscles per c.mm.

Among other symptoms of congenital morbus cordis respiratory acceleration is the rule, though it does not always occur when the child is at rest. In some cardiac pain is a feature. In a case reported by Hand, junior (34), in a case of pulmonary atresia, attacks of dyspnoea were associated with heart pain, an angina pectoris, and during the attacks the respirations were slow and laboured. The pulse is often accelerated. In only one form of malformation is it slowed, and that happens sometimes in pulmonary stenosis. The temperature is frequently subnormal. Growth and nutrition may both be faulty, and infantilism sometimes results.

NOTE (Editorial).—Considerations of space prevent us publishing the whole of this valuable lecture. In the remaining portion the author deals exhaustively with congenital heart murmurs, defects in the interauricular septum, stenosis and atresia of the pulmonary region, ductus arteriosus, co-actation of the aorta, congenital aortic stenosis and aortitis, hypoplasia of the aorta, the auriculo-ventricular valves, hypertrophy, and cardiac displacements. A full literature and many illustrative cases are appended.

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### THE PSYCHIC TREATMENT OF ALCOHOLIC INTEMPERANCE, BASED ON A PERSONAL EXPERIENCE WITH 1,000 CASES. (a)

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I HAVE been requested to discuss the treatment of the drink habit by hypnotic suggestion; and I shall consider the question with reference especially to the *technique*, the class of cases that are amenable, time limits of treatment with general results, and permanency of cure.

The phenomena of suggestion are explicable on the theory of simultaneous self-manifestation in two distinct worlds of consciousness—a theory now generally accepted by psychologists. These are distinguished as the objective or supraliminal, the world of every day waking life; and the subjective or subliminal, the world of sleep, in which the immaterial part of the man employs itself without corporeal restraint. The subliminal, superior, or better self—the *pneuma* or spirit of the New Testament—is that deathless entity that constitutes the true or "inner man," a vast spiritual organism, the created copy of God, and as such measurably endowed with divine attributes and powers. The objective self is an expression, imperfect and partial at its best, of this subliminal through "the flesh," that is, organs of body and faculties of mind. Now the possibilities of a psycho-dynamic control of the objective life by this higher self are practically boundless, and the whole purpose of hypno-suggestion is the establishment of such control, either where it has become relaxed or in fields where it has not before been exercised. So long as the subpersonal mind quickens sound organs, all defects or irregularities in the fulfilment of their functions may be remedied by assumption of the natural psycho-physical regulation, and so diseases

(a) Delivered at Washington D.C., March 8th, 1909.

that are not organic are curable by appeal to the subliminal self which orders organic life. Still further, all attitudes of the objective mind—its trends of thought, opinions, beliefs, desires, propensities, tendencies, emotions, and passions—are controllable and alterable by this higher human personality, exclusively along lines that are moral and true. And suggestion is nothing but a straightforward, heartfelt, forceful appeal to this personality, the source of spiritual energy in man's being. It is of the nature of creative communication, a calling forth into overpowering action of the God part of man—action that carries all before it in the earth-life—all tendency to deviation from the normal type, physical, intellectual, moral—even the objective will itself, iron though it seem to be.

Man, then, in his higher personality, is adequate to the extirpation from his objective nature of any abnormal craving or passion, like the craze for intoxicants. The latter is singularly responsive to treatment by suggestion. In fact, many of the popular drink cures are in reality mere suggestion cures, there being no peculiar virtue in the drugs administered, as there is no specific for the cure of drunkenness. The temporary success occasionally met with is due entirely to suggestive action on a susceptible patient anxious for relief. The fascination of mystery plays its part in the process, and thus the charlatan differs from the regular physician who operates on the psychic centres with the full consent and knowledge of the patient.

The notable increase in the consumption of stimulants, especially among the upper classes, estimated at ten per cent., during the last decade in the case of men, and a much larger percentage in that of women, is inviting anxious attention to a means of treating the victims of alcoholic inebriety, for which so much has been claimed in this country and abroad. Upward of one billion dollars are spent annually in the United States for intoxicating drinks, and another billion for the relief of the destitution, the punishment of the crime, and the care of the physical and mental diseases that result directly from the drink habit. Especially alarming is the growth of the practice among our women. The punch-bowl figures at all functions, and proud-pied matrons dip freely therein, ten drinking to-day where one drank a dozen years ago. School misses and college girls are conspicuous among the throng. Such has become the vogue; and, worse than this, girls in their teens see no impropriety in drinking publicly with men companions.

Not a few women have lapsed into the drink habit from the use of patent medicines containing large percentages of alcohol. Many a clergyman can date his downfall from his first dose of Jamaica ginger. The step from "disguised boozes" (upon which \$75,000,000 are annually expended) to whiskey, their main constituent, is more than easy. Even school-children are becoming beer and wine drinkers, especially those of foreign parentage, and the increasing prevalence of this habit is leading to a mental sluggishness, if not defect, among the pupils of the public schools that is attracting the attention of educators and philanthropists. In few, the prevalent wholesale addiction to the use of alcoholic stimulants—with its accompanying degenerations of kidney, brain, heart, liver, stomach, and arteries; its pernicious influence in the causation of pneumonia and tuberculosis; its direct action in diminishing nervous resistance and so increasing the mortality rate in the case of all diseases; the part it plays in the induction of insanity, one-third of all mental affections being due to its abuse; and its tendency to transmit to offspring not only epilepsy and mental defect, but marked degeneracy and criminal propensity, is assuming proportions so appalling that it may justly be regarded as perhaps the greatest existing menace to the stability of American institutions.

Moreover, the rank and file of the drinking population are swallowing a poison far deadlier and more rapid in its action than genuine ethyl alcohol. This fact is ignored by the temperance reformer and often by the physician. The consumption being greatly in excess of the ability of the brewers and distillers to

produce wholesome beverages, notorious adulterations are resorted to. About fifty million barrels of malt liquors represent the yearly output of the United States. Much of this, to meet the demands of trade, is sold when new and imperfectly fermented, and a great deal of sickness is the result. Besides, the beer drinker has to run the gauntlet of various preservatives, especially formalin, with its destructive action on all the organs; of artificial bitters like salicin, picric acid, quassia, strychnia, and aloes; even of arsenic derived from sulphuric acid made from arsenical pyrites, and used in the process of manufacture to convert the starch into glucose.

Intoxicating liquors are as liable to adulteration; but it must be conceded that it is the raw alcohol as well as the admixtures that causes the chronic catarrh of the stomach, the Bright's disease, the arteriosclerosis, the palsies and ataxias, the nervous bankruptcy, and the moral degradation of the dram drinker. Good rum as well as bad rum will, when used to excess, gradually convert the different organs and tissues of the body into specimens of degeneration and disease. Bad rum is more prompt in its action, and almost all the rum that is retailed is bad, the alcohol being made from corn, roots, refuse molasses, and even sawdust converted by acids into a fermentable sugar. It is the practice of the liquor dealer to stock his cellar with casks of crude grain or potato spirit liberally tintured with fusel or grain oil, an irritant poison. He then provides himself with a full line of laboratory-made essences—brandy essence (consisting of oil of grapes, acetic ether, allspice tincture, and alcohol), rum essence (composed of butyric ether, acetic ether, vanilla tincture, essence of violets, and ninety parts alcohol), gin essence, hot-drop essence, whiskey essence, etc., and in accordance with the instructions of a hand-book furnished by the essence manufacturer proceeds to make from the same barrel of crude grain spirits, by the addition of the prescribed quantity of the several essences, what he advertises over his bar as pure liquors. The same barrel gives birth to Bourbon, rye, wheat whiskey, malt whiskey, Scotch and Irish whiskey, Jamaica and Medford rum, Schiedam-schnapps and Old Tom, cherry, peach, apple, blackberry, and Cognac brandy. The cost of the amount of essence required to manufacture in this way 120 gallons of Cognac, 160 gallons of gin, 40 gallons of any kind of rum, and 160 gallons of any kind of whiskey, varies from \$3 to \$4. Such are the cheap artificial imitations of distilled spirits, the frightful compounds of fusel oil and whiskey essence the saloon-keeper palms off with impunity upon the *habitués* of his cabaret. Properly matured ethyl alcohol or unadulterated whiskey, itself a protoplasmic poison, is hardly obtainable in an American bar-room. Of every hundred drinks sold in the United States as whiskey to-day, only one is really whiskey; but so clever is the counterfeit that club connoisseurs have failed to detect it. Amylic alcohol, or the common whiskey of trade (and it matters not whether it is dispensed by a bishop or a bravo), is the "death's river" setting in resistless current toward murder, robbery, misuse of women, paresis, and the asylum. Whatever moral, social, or legislative measures may eventually be adopted looking to the suppression of the drink habit, we are in urgent need of power to restrain in appropriate institutions the habitual drinker of these poisonous spirits, who is, under the present conditions, a danger to himself, a curse to his family, and a nuisance to the State.

The following case of a gentleman who drank whiskey is representative both of the alcoholic disease and its causation, and of the method pursued:—

Four years ago Mr. A., who had vainly resorted to the popular drink cures, was induced by his friends to make trial of psychic treatment. Beginning as a college boy to carouse with his mates, engaging in contests to see who could drink the most beer in the shortest time, he passed successively through the stages of occasional use for convivial reasons, frequent indulgence to brace him for task or pastime, periodical paroxysms of alcoholic debauchery, until at forty he found himself a continuous drinker impelled by an

irresistible and insatiable craving, with marked stigmata of degeneration and a growing incapacity for professional duty. His wife and daughters, for years subjected to constant humiliation at his hands, had come to feel the pinch of want, and smarted under the construction placed upon his actions by a merciless society. Affection had died in his heart and with it both self-respect and religious sense. In such a case at least a year is usually required of forced feeding and restricted activity to repair the damaged brain cells and so restore the patient to normal efficiency. But within a week the mental attitude may be permanently changed and the craving for stimulants obliterated, without experience of the nervous exhaustion and unrest that usually accompany discontinuance of the habit. Since his first *séance* (now six years ago) Mr. A. has experienced no desire for alcohol. The suggestion was given that he would no longer deceive himself with the thought that he could safely take one drink and then stop, but that it was impossible for him ever to want a drink or ever to take a drink for any conceivable reason. He has abstained, not through conscious effort, but spontaneously because of an ingrained disinclination to drink, conditioned by subpersonal control. In this instance it was further necessary to forbid the use of tobacco, the inhalation of which in the form of smoke, by depressing the nerve centres and thus creating an imperious demand for its antidote (whiskey), explains seventy-five per cent. of all the cases of methomania. The chain of cause and effect was broken at a blow. The patient neither smokes nor drinks. And he has made amends for the suffering he inflicted on his family by exalted action meriting their respect and love.

In contrast with the foregoing is the following extreme case of chronic poisoning by adulterated liquors excessively indulged in between the ages of sixteen and thirty-seven. Every Saturday night W. B. drank to intoxication, and committed other excesses that fill his mind with remorse, so that his condition borders on theomania. He imagines the people riding on the car with him know all that he has done, and that the children on the street are cognisant of his misdoings, and are calling him names significant thereof. He is afraid of everything. He suffers from hallucinations of vision. A woman with a baby carriage is forever following him. He sees green flashes in the dark, and men going through various motions. Flies attend him everywhere, hovering about, showing him how to use his tools, etc. He does not know the difference between a real and an imaginary fly, and continually shoos the latter variety. Three separate voices talk to him, coming up the dumb-waiter shaft or speaking through the window. They never desist even while he is at work, and at times seem so real that he looks around to see who is speaking. One voice will keep repeating some message, laying stress principally on his sins. If he is reading a paper it reads ahead of him. Three years ago his mind gave way, and he took a flat-iron and went upstairs to kill a man who was calling him vile names, the man being perfectly innocent. He rallied from this seizure, but returning to his fusel oil he has become subject to melancholy spells and to attacks of amnesia, so that he loses his sense of identity for days at a time.

This is not a common case of three sheets in the wind, but rather of a noble brought to ninetence through incurable degeneration of the brain. There is no hope for such a victim in mental theriology.

By means of the enlightened employment of hypno-suggestion, the subliminal self of the ordinary inebriate may be placed in control. So it is no longer a valid argument for a man to hold that he gets drunk because he cannot help it. Statistics show that the treatment of alcoholic subjects by suggestion (in this country and abroad) gives at least seventy-five per cent. of radical cures. All other known methods have never given more than thirty per cent.

Dipsomaniacs, as a rule, are easy subjects, in that they yield readily to the hypnotic influence, and accept unconditionally the suggestions communicated by the operator. Regular drinkers may be dealt with whenever they can be induced to be sober. Periodic

drinkers should be treated just before the close of the cycle of sobriety. Regularly recurring debauches have periods of varying length, the longest in my experience being three years; and I have satisfied myself that in many instances a relationship exists between the abuse of tobacco and the on-coming of the irresistible thirst, the depressing effects of the nicotine instinctively suggesting recourse to the antidote. Periodic drink-storms are usually forecast by significant indications well known to the family and friends of the victim—irritability of temper, unreasonable suspicion, so described "cranky spells," abnormal restlessness, unaccountable depression. Immediately upon the appearance of these symptoms the patient should be treated by suggestion, before opportunity is given for indulgence of the craving. Such a subject frequently recognises his danger and sincerely wishes to be cured. He is tactfully conducted into the subliminal sphere, and then assured that, in accordance with his own desire and decree, he has lost all craving for beer, wine, whiskey; that alcohol in any form is repugnant to him, and, as a safeguard, that he cannot swallow it, cannot carry the containing glass to his lips. The society of low companions is tabooed; the pleasures associated with drink and the glamour of the bar-room are pictured as meretricious, and placed in vivid antithesis to the chaste delights of home life. The physical, mental, moral, and economic bankruptcy that accompanies dipsomania, is held up before the view of the sleeper, and he is forced to the conviction that begotten of this apprehension has come into his soul an abhorrence for drink and all that it stands for. He realises the presence of efficiency within him adequate to the enforcement of radical abstinence as the principle of his life; and he is rendered insensible for the future to any such combination of passion and allurements as has usually constituted temptation. So he is led instantaneously to scorn recourse to alcoholic stimulants, or to extrinsic exaltation of any kind, either for convivial reasons or in time of depression, misfortune, or sorrow, and to depend exclusively, under any mental or physical strain, on the units of energy legitimately manufactured out of nutritious food, non-intoxicating drinks, air, exercise, and sleep. The subpersonal mind is then directed to the vocation or the avocations, or both, as circumstances suggest, and a career of wholesome activities and satisfactory success is imaged as the legitimate result of the abandonment of the compromising habit.

Hypno-suggestion here is clearly of the nature of inspiration. It is a summoning into control of the true man. For the patient freely expresses his best self post-hypnotically, without effort, from a plane above that of the will—the plane of apprehension and spontaneous command along lines of thought and action that are worthy and wholesome. And inspiration, to be efficacious, cannot be mere lip work or rote-lesson. It implies a belief in the suggestions offered, an eloquent and incisive manner born of the courage of conviction; in short, it is a transfusion of personality. Perfunctory speeches are of no avail, for the mind of the subject is endowed with supernormal insight, at once detects the disingenuous, and declines impulsion at the hands of an insincere or lukewarm operator.

A *sine qua non* of success is the consent of the patient, an honest desire on his part to reform. Habitual drinkers, those who "soak," as Goldsmith described it, do not, as a rule, wish to be cured. They enjoy indulgence in alcoholic beverages and the false pleasures that attend it; and about ninety per cent. of them, women as well as men, resent the approaches of those who desire to save them. Sometimes, when no other form of appeal is effective, they may be frightened into a realisation of the fact that constant use of alcoholic stimulants will result in organic changes in the liver, kidneys, and brain, or by lowering the general powers of resistance and at the same time irritating the bronchial tubes and the lungs, through which the alcohol is in part eliminated, markedly predisposes to pneumonia and tuberculous consumption. In fact, immoderate drinkers may, in sober intervals, be made to realise, not only that they

are physically depraved, but intellectually degenerated as to the faculties of memory, attention, concentration, judgment, and that they are deficient in business tact and in the general address essential to success. Once apprised of their enervated mental condition, they are overcome with remorse and honestly desire to correct the habit. Under these circumstances it is comparatively easy to persuade a patient to accept treatment, and a rescue may be effected in a week's time. To quote a Hindu proverb, "In the awful silence that follows the storm, not in the silence before it, we should search for the budding flower."

No reference is here intended to dipsomania as a true circular insanity, characterised by irresistibly compelling paroxysms of thirst and accompanied with uncontrollable nervous and mental excitement. It has been truthfully said that a sufferer from this disease is insane before he begins to drink, and would continue to be insane during his period if whisky were unobtainable. Thus there may be dipsomaniacs who have never tasted alcohol. The alcohol is a secondary factor. In other words a man may drink because he is crazy, or be crazy because he drinks, or both; and a physician who grapples with the combination has a veritable wolf by the ears.

It is not claimed that the tendency to relapse is absolutely obliterated by suggestion. The cure may or may not be permanent, as is the case with rheumatism, quinsy, bronchitis, intermittent fever with its distinct germ and distinct specific. No physician is asked to guarantee a patient against a recurrence of tonsillitis, especially when the patient deliberately exposes himself to the appropriate conditions of a relapse. More cannot be expected of the physician suggestionist, who is not a miracle-monger. The utmost he can do in a prophylactic line is to reject all compromises in his treatment, suggest total abstinence, forbid exposure to temptation, and render insensible to the psychology of the saloon. Experience proves that it is always better to deal in drink-habit cases with the nearest of kin rather than directly with the patient, who naturally over-estimates his power of resistance and is singularly impatient of restraint. Courting a conflict with the demon of drink, as many do, is playing with fire.

Various reasons are advanced by backsliders to explain their relapses, and some of them are most trivial, as the death of a favourite dog, dull times, inharmonious in the family. Some drink when they feel best, others when they feel worst, other some because they deem it a satisfaction to "go off on a tear and tank up." One man used the argument that he had gone sober so long he was justified in a debauch. A lady admitted her motive to be the delight she experienced in drinking with her admirers and listening to their flattery and compliments. Another lady, with a much greater show of reason, explained her periodicals as due to the cumulative brain fog resulting from a miscellany of little worries. Here, as in many similar cases, alcohol serves to obscure fatigue or cell exhaustion, which, if so treated, must end in neurasthenia or irreparable brain damage.

Many drink to dispel the blues, to induce sleep, to rouse courage or confidence. A very intelligent inventor offered four reasons for indulgence, viz., requirement of the system in consequence of physical depression, sociability, business necessity, and cold blood or "pure cussedness." Sometimes the drinker has no object in view, but seems to be actuated by a sense of obligation to a long-standing habit, periodical conformity to which is fraught with discomfort and misery. The psychology of this latter mental state is illustrated by the following experience of a friend, who, a summer or two ago, met a former acquaintance on the public highway, trudging along to a near-by village. "Where are you bound for, Uncle Billy?" he inquired, in a spirit of neighbourly bonhomie. "I am going into Johnstown," was the reply, "to get drunk, and O Lord! how I dread it!"

I have already stated that seventy-five per cent. of inebriates are abusers of tobacco, and that in this latter abuse is to be found the proximate cause of much alcoholic intemperance. The real danger to the smoker consists in the habit of inhalation, whereby

the volatilised poisons of tobacco are brought into immediate contact with many hundred square feet of vascular air sac walls in the lungs, and are thus promptly and fully absorbed, to be diffused into the blood and carried on their fatal errand to the several organs of the body. Young subjects immediately learn to inhale. They are, moreover, markedly susceptible to the influence of tobacco poisons. Gravest of all the resulting evils is the lessening or complete loss of moral sensibility, with a conspicuous tendency to falsehood and theft. The moral propensities are eventually destroyed because of the destruction of those elements of the brain cells through which moral force is expressed. The victim degenerates into an unmanly, unprincipled, irresponsible doddie-poll, in splendid fettle for the penitentiary or the mad-house.

The circulation through the brain of tobacco smoke poisons and alcohol, destroys the capacity for expressing through that brain earnestness and sincerity in efforts to reform. Fortunately, the damage done to the cells is reparable by the discontinuance of the toxins and the judicious administration of nourishment, general and specific. While hypnotic suggestion may regulate a disturbed metabolism in the nerve organs, or check atrophic changes in cell protoplasm, it cannot be expected to repair lesions in the blood-vessel sheaths, or suddenly atone for the results of an exaggerated destructive metamorphosis in the nerve-cell bodies. Therefore, in my treatment, alcohol is immediately withdrawn; stimulating liquid food is given every two hours for a day or two; and the phospho-glycerates, representing true brain aliment, are administered for six months to a year, with a view to refining the quality and increasing the quantity of the lecithin through which resolution and general manliness are expressed. In the insanity of extravagant drinking, coupled with chronic nicotine poisoning, suggestive treatment may sometimes be delayed with advantage until after the compulsory reduction or withdrawal of the artificial stimulant. Patients who, to rid themselves temporarily of the importunity of relatives, accept an institutional life, with mental reservation as to their habits at the termination of the period of treatment, are proper subjects for suggestion while in sanatorium. "The tongue has taken the oath, but the mind is unsworn." Under such circumstances, with the craving in lull, the subliminal self may be successfully impressed.

The success of the treatment outlined above bears a distinct relation to the amount of injury already inflicted upon the brain cells and the accompanying mental deterioration. Its advantage consists in the rapidity of restoration to self-control without the necessity for effect of will, without the physical discomfort of suffering that usually attends abandonment of the habit, and, most conspicuously, without the breaking of family ties and the enforced absence from professional or business duties that are implied in sanatorium treatment.

The views here advanced are based upon an experience with some thousand cases of alcoholic intemperance extending over a period of ten years. Of these, between eighty and ninety per cent. have been restored. Of the remaining fifteen per cent. a number cannot be traced; a number indifferently submitted to one or two treatments out of deference to the entreaties of friends, and hence there was no objective self-surrender; a few had become paretic before the treatment was begun; a small fraction were society women, who, in my experience, are almost without the pale of hope. In no other condition that I have been called upon to treat by suggestion am I so unreservedly warranted in saying to the sufferer, "If you sincerely desire to be cured of this malady, and will carry out my instructions faithfully for a year, you can be cured beyond a peradventure."

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DR. F. W. PAVY, F.R.S., who represented the British Government at the International Medical Congress, Budapest, last week, presented the official invitation to "meet again" at London in 1913, which was cordially accepted.

## HEREDITARY SUDDEN DEATH.

By A. GILBERT, M.D.,

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AND

A. BAUDOUIN, M.D.,

Ex-Interne of the Hospitals, Paris.

[SPECIALLY REPORTED FOR THIS JOURNAL.]

WE sometimes meet with instances of sudden death in persons who may or may not have presented premonitory attacks of syncope. We must not look for an explanation of their untimely end in a non-existing heart disease but on an hereditary predisposition, which may be elicited by aetiological investigation. In these cases there is a sort of diathesis, the diathesis of sudden death, which is the subject of this article.

We have not been able to discover any reference to this morbid type in medical literature. Text-books of pathology, it is true, occasionally mention the hereditary nature of certain forms of syncope. As Merklen remarks "with respect to the tendency to syncope and its consequences it is important not to lose sight of individual predisposition and the state of the heart. Some people faint or fall into syncope on the most trivial thing; an emotion, a particular odour, the sight of blood, trifling pain, intestinal disturbance, etc. This special sensitiveness is innate, often hereditary, and manifests itself from childhood. These, however, are cases of simple faintness, which is something quite distinct from fatal syncope.

Even those who have devoted special attention to heredity have nothing to say with reference to hereditary sudden death, and text-books on legal medicine are mute on the subject. Alone Dr. Vibert mentions a case, referred to later, of two sudden deaths, in father and son, and even he does not seem to have drawn any conclusion from this isolated instance.

Nevertheless, in spite of the absence of exact data on the subject, medical examiners for life insurance seem to have a glimmering idea of the kind, since the sudden death of an ancestor is always regarded by them as a sufficient reason for demanding an extra premium. The public, too, seem to have vague floating ideas of the kind, and our object is to establish, as far as possible, the degree of truth comprised therein.

We have had under observation six families from this point of view, five in private practice and only one in hospital. The facts came to our knowledge, so to speak, of themselves, in the course of a few months, without any investigation on our part. It may, therefore, be inferred that this morbid state is far from rare, indeed, that it is tolerably frequent. Its importance is enhanced by its bearings on hygiene and legal medicine.

Sex appears to possess a certain influence. Our inquiry bore on fourteen persons who had died suddenly, and of this number eleven were men and only three women. Although the limited number of our cases does not warrant any firm conclusion, we hold that this special predilection for the male sex is worthy of note because the tendency to faintness is far more marked in women.

The age at which the fatal syncope took place is very variable, oscillating between twenty and sixty-two years of age. Speaking generally, the incidence of sudden death is earlier in the descendant than in the ancestor by whom the diathesis was transmitted. This is on a par with what is observed in other morbid states transmissible by heredity, diabetes for instance. In cases in which the difference of age is very marked we may invoke bilateral heredity as in one of our own cases. The paternal grandmother of B. died suddenly at the age of 52 on his return from a watering place; B.'s mother is still living but has twice had syncope attacks and turns faint whenever she sits in a train with her back to the engine. Quite recently, after abdominal hysterectomy for fibroid, she was suddenly seized with grave asystole which yielded only to energetic treatment. B. died suddenly at 27 years of age after a series of syncope attacks. Death at this early age was attributed to his father and grandmother. We hold that the influence of maternal

heredity may also be invoked in this instance, especially as the syncope tendency is well marked in his mother.

The underlying cause of the diathesis is heredity. In most of our cases this can only be traced one degree, from father to son. In two cases it was traced back two degrees. The first was the patient whose case has just been related, the second was that of a woman, æt. 40, whose paternal grandmother died suddenly at 60. Her father succumbed in like manner at 62 after his day's work, and the patient herself presented a well-marked tendency to fainting attacks. In this instance the tendency reached to three generations. No doubt if one could go further back other antecedents of the kind would be discovered. We are inclined to think that such would be the case although *a priori*, one might argue that the existence of this diathesis would lead to the early extinction of the family. Such inquiries present innumerable difficulties. To begin with, the subject of inquiry dates back to ancient history, the incidents of the kind may have been forgotten by the descendants, moreover, families in which sudden death occurs are anxious to keep the matter secret.

Independently of heredity our investigations brought to light many and various predisposing causes. Some of them, supervening only a short time before the final syncope played the part of accidental causes. These indeed are anything but constant, for in several instances nothing whatever could be discovered. In one, a person free, as far as was known, from disease and previously in excellent health, fell dead when out walking; similarly in the case of a man who all at once felt queer, went to bed, asked for something hot, and expired forthwith.

Then, too, the accidental cause is often so trifling that it cannot account for the brutal end, as in the case of a man suffering from physical and mental overwork who had contracted a mild attack of influenza which kept him at home. His state inspired so little anxiety that he spent the evening preceding the fatal syncope playing cards merrily with his friends.

We do, however, meet with more serious causes, though always quite ordinary, of a kind that would not be productive of any serious trouble in the average healthy man. Independently of syncope heredity we meet with alcoholic habits, attacks of gout, and addiction to narcotics, especially morphine. In two cases there was a history of mild syphilis under proper treatment. Professor Fournier has drawn attention to the frequency of sudden death in syphilitic subjects, but in our opinion the syphilis had nothing to do with death in these two instances. When fatal syncope is due to syphilis it is generally consequent upon chronic aortic lesions. In these cases the most careful auscultation had failed to reveal anything abnormal and in one of them the patient had had six severe attacks of syncope before the terminal one. These had taken place at long intervals, from infancy upwards, and five of them occurred prior to his contracting syphilis.

Some insignificant surgical operation, in a person with this morbid heredity, precipitated death in a case reported by Dr. Vibert. A child, of twelve years of age, died suddenly after cauterisation of pharyngeal vegetations. The child's father had died under very similar circumstances. He was stung by three or four wasps, managed to reach home with the greatest difficulty, and died almost at once.

So far we have only met with commonplace precipitating causes, and as in all our cases the existence of syncope heredity was clearly established, we are justified in according it a foremost place. We have, however, occasionally come across instances in which the accidental cause was, on the contrary, so manifest that it seemed to dispense with the necessity for looking further, but even in these, as the morbid heredity was quite clear, it may be held to have played a part. Obviously it is not everything, but even so it may have contributed to the result.

One was a case of sudden death during an attack of pleurisy. A young woman, æt. 20, had an attack of pleurisy, *à frigore*, in January, 1908.

Physical examination revealed a moderate amount of effusion, not displacing any organ, and the heart in particular appeared quite healthy. In the course of a few days, as the fluid had somewhat increased in amount the desirability of puncture was discussed when all at once the patient, after an attempt to sit up in bed, fell back dead.

Observations of this kind are plentiful. In some, death was rapid but not sudden, and was ushered in by asphyxial symptoms, and at the autopsy cardiac thrombosis or pulmonary embolism was found. In others, death was quite sudden and nothing could be found post-mortem.

Professor Dieulafoy observes that in these cases the pleuritic effusion is more frequently on the right side, adding that there is a difficulty in explaining death. In the case of the young woman just referred to, it is open to question whether heredity may not be incriminated at any rate on one side. Her father, a doctor, complained all his life of oppression and palpitation. He is still living, but displays a tendency to faint on the slightest effort.

The second case is one of fatal syncope in a man, æt. 39, after the administration of a moderate dose of cocaine in view of an operation for cataract. The operation took place at 8 p.m. Everything went off smoothly and the patient passed a good night, but at 5 a.m. he suddenly expired. We can hardly incriminate the cocaine since death did not occur until nine hours later. His father had also died suddenly at the age of 49.

In all we find traces of the same diathesis, and this may help us to explain many cases of death under chloroform. Patients suffering from very mild attacks of typhoid fever sometimes die quite unexpectedly, and here again it would be well to inquire into the family history.

One of the most interesting points, possibly the most important of all, is the supervention of periodical attacks of syncope before the fatal one. This was the case in two of our patients. In one, according to his mother's story, he had had six such attacks before the last, and it is highly probable that he had had others of which she knew nothing. The first occurred at five years of age, the second at fourteen, both while travelling by rail. The third and fourth occurred at school, and the second of these was particularly severe and prolonged, in fact he was thought to be dead. He had the fifth while serving in the army, and the sixth in December, 1907, one month before the final attack in January, 1908. This sequence is very characteristic, and we cannot insist too strongly on the gravity of these disturbances, this gravity, indeed, distinguishes them from mere attacks of faintness.

In other cases the syncopal tendency was less marked, and in some it is distinctly stated that none had ever occurred.

In these cases, apart from the morbid heredity and the habitual pallor of the case sometimes noted, there is little to note. Death may not be preceded by any premonitory signs, one patient fell dead in the street, another when out walking, the body of a third was found in bed with the bedclothes undisturbed and a calm look on his face. Sometimes, however, the patient experiences a vague malaise, he groans, asks for something to drink, turns and twists himself about, but in all death is sudden, not the death that follows cerebral hæmorrhage but death due to arrest of the heart.

Now to what does this diathesis correspond? What is the *primum movens* of this sudden arrest of the heart? Of this we know absolutely nothing and we are reduced to hypotheses, which we will now briefly discuss.

Is it due to changes in the cardiac muscle fibre? We are beginning to grasp the fact that the myocardium is not a constant factor, that there is such a thing as congenital or hereditary weakness of the heart muscle. Whether sudden death is to be attributed to this cause is another matter. We might just as reasonably incriminate the intra-cardiac nervous system, the pneumogastric or the medulla. This is for the time being an insoluble problem, indeed, so far, we are

not even in a position to explain the mechanism of death from heart failure in the course of acute infectious diseases.

We have already insisted on the necessity for distinguishing between the tendency to grave syncope associated with this predisposition and mere faintness. There may be intermediate states, but in typical cases they are easy to differentiate, and it is important that this should be done in view of the difference in the prognosis. Benign in one case the prognosis may be very grave in another, a fact of which the patients themselves are often aware. We have met with patients whose life was one long anguish with the terror of an untimely end ever before their eyes. One patient who had lost both his father and his brother from sudden death lives on in a state of abject apprehension. "I have my father's heart," said one woman, and I shall die like he did."

This morbid state hardly admits of treatment beyond strict hygiene. It is nevertheless very useful to be aware of its existence, for in practice this knowledge may enable us to foresee or explain the possibility of sudden death, and, on the other hand, it shares the interest that attaches to everything bearing on the great problem of heredity.

## OUT-PATIENTS' ROOM.

### ROYAL FREE HOSPITAL.

#### *A Case of Simple Ganglion.*

By WILLMOTT EVANS, F.R.C.S.

MR. WILLMOTT EVANS had a patient, a young woman, æt. 24, on the back of whose left hand was a semi-globular swelling measuring about an inch in diameter. It was tense, and fluctuation could be detected. It had existed some six months, and it had followed a strain. It was evidently an ordinary case of simple ganglion. Mr. Evans treated it as follows:—The skin over it was washed with a solution of carbolic acid, one in thirty, and the surface was then frozen by an ethyl chloride spray. The point of a tenotome was passed into the swelling, and it was turned in different directions so as to penetrate into every part of the swelling, the handle of the tenotome being kept parallel to the back of the hand. When the tenotome was withdrawn pressure on the ganglion caused the exudation of a clear, jelly-like substance. A small pad of gauze was placed on the site of the swelling, and a bandage applied. Mr. Evans said there was seldom any difficulty in the diagnosis of these cases, though it was important to bear in mind that some of these ganglia were tuberculous in origin, and they required different treatment. Compound ganglia were nearly always tuberculous, but it was quite exceptional for a simple ganglion to be tuberculous.

The mode of origin of these simple ganglia was not only of interest, but it also had some therapeutic importance. The older explanation and one still to be found in many text-books was that a simple ganglion arose as a hernial protrusion from a tendon sheath, and that later the communication between the protruded portion and the general cavity of the tendon sheath became blocked. In opposition to this explanation, it might be pointed out that the stage where the cavity of the ganglion still communicated with the cavity of the tendon sheath had not been seen, and, further, that the contents of the ganglion did not consist of ordinary synovial fluid, but contained a much larger proportion of mucoid material. For these reasons he did not accept this explanation. The other explanation was that put forward by Sir James Paget. He suggested that the condition was produced by a mucoid degeneration occurring in one or more of the fringes of the synovial tendon sheath. In favour of this explanation there was the fact that synovial fringes were prone to undergo mucoid degeneration, and also that it was not unusual, in fact, it was almost the rule, that a simple ganglion was loculated, that is, it consisted not of a single cavity, but of a number of separate, non-communicating cavities. It was impossible to explain this fact on the hernial theory, but



it was easily explicable on the theory of metastoid degeneration occurring in several foci. The treatment, however, was of the most importance. The oldest method of treatment was to endeavour to burst the sac by means of external violence. The wrist was forcibly flexed, so as to make the ganglion as tense as possible, then steady, firm pressure was applied, or what was more effective, a sudden blow was given with a heavy object, such as a large book. The amount of force required was sometimes great, especially in the more chronic cases in which the wall of the ganglion had become thick. When the ganglion wall gave way the contents were poured out into the subcutaneous tissue and were absorbed by the lymphatics. Mr. Evans had on one occasion seen a rather sharp attack of a localised cellulitis follow the treatment by rupture; but the cellulitis had disappeared in three or four days with cooling lotions, and probably it was due to some chemical irritant contained in the ganglion and not to any microbic infection. The most convenient treatment Mr. Evans considered to be that employed in the case shown, namely, evacuation of the contents through the opening made by a fine knife, after freezing the part to prevent pain. By this method it was possible to break down the trabeculae which divided the cavity into a number of separate spaces. The operation was rapid and harmless, and it caused less pain than the method by forcible rupture. In some cases where recurrence had occurred, or where there was any reason for thinking that the ganglion was tuberculous, the best treatment was excision. This was a simple operation, and though a general anaesthetic was convenient, it was by no means necessary, for local anaesthesia was quite sufficient. This was best attained by subcutaneous injection of a weak solution of any of the ordinary local anaesthetics, beta-eucain being probably the best, and only a small incision was required. The X-rays were capable of causing the disappearance of simple ganglia, whether tuberculous or not, but great care was required to prevent a harmful action of the rays on the skin. A word might be said on the question of recurrence of a ganglion after apparent cure. In some cases it was a true recurrence, the same sac being refilled with fluid, but in many cases it was certainly a further formation of ganglia in the neighbourhood of the one which had been already cured.

## OPERATING THEATRES.

### GUY'S HOSPITAL.

**TREATMENT OF VICIOUS VOMITING AFTER GASTRO-JEJUNOSTOMY.**—MR. ROWLANDS operated on a young woman who had formerly been a nurse in America, and had been operated upon by a distinguished surgeon at Cleveland for a large gastric ulcer in the pre-pyloric region. Very soon after this operation vicious vomiting set in, although the operation was successful in abating the symptoms of gastric ulcer. The patient had been referred to Mr. Rowlands for operation by Drs. Morton Palmer and Hertz. The patient used to vomit a large quantity of bile-stained material nearly every day, and she had lost about a stone in weight. Dr. Hertz had examined her by his method of X-rays and bismuth, which showed that food passed freely through the gastro-jejunostomy opening, but still the patient vomited freely during her stay in the hospital, and therefore an exploration was decided upon.

A great many adhesions were found to the anterior abdominal wall from the stomach and from the region of the old ulcer. Search was made among these adhesions for an anterior gastro-jejunostomy which was said to have been performed, but no signs of this were found. On turning up the transverse colon a posterior gastro-jejunostomy was discovered, with reversion of the jejunum, and within 2½ in. of the end of the duodenum. The proximal part of the jejunum had been drawn up by the contracting stomach in such a way that all bile and pancreatic juice had to enter the stomach before it could reach the jejunum beyond the anastomosis; in fact, a complete spur had formed,

and also some adhesions between the two kinks of the loop, and contraction of the aperture in the meso-colon maintained this condition. The proximal jejunum was divided close to the stomach, and the gastric end sutured and sealed, while the other or duodenal end was implanted in the side of the distal jejunum 4 in. below the gastro-jejunostomy, thus converting the operation into the well-known one bearing the name of Roux. The abdomen was closed in the usual way.

Mr. Rowlands said that gastro-jejunostomy was a very safe operation at the present time, the mortality being very low, but there are some complications connected with it which he thought were more serious than death, as all those who had to deal with vicious vomiting well knew. This condition, which does, unfortunately, still happen, in spite of all modern improvements, was, however, getting less common. It was, he considered, always due to an intestinal obstruction high up; this may be either at the proximal or the distal side of the anastomosis. In the present case he pointed out it was only on the proximal side, as shown by Dr. Hertz's X-ray method, and also at the operation. Nervous women seem peculiarly liable to the affection. It was well-known that bile and pancreatic juice enter the stomach after gastro-jejunostomy, and it was asserted that this was one of the main reasons why the operation was beneficial in gastric ulcer; yet in some women it gives rise to vomiting, in spite of a very large anastomotic opening. Various methods, he remarked, have been employed for its treatment, often without success. The most common was a lateral anastomosis between the bowel above and below the gastro-jejunostomy, but this may still allow bile and pancreatic juice to reach the stomach, and this was especially true for no-loop operations in which the lateral anastomosis cannot be made very large nor placed far enough away from the stomach. It seemed to him that the only certain way was the method he had employed in this case—i.e., that of converting the operation into a Roux and thus making it impossible for the bile and the pancreatic juice to enter the stomach through the gastro-jejunostomy opening. With regard to Roux's operation, Mr. Rowlands said it was not generally looked upon with favour as a routine primary operation, because it was more complicated than an ordinary posterior gastro-jejunostomy, which was usually very successful; moreover, that terrible sequela peptic jejunal ulcer, has followed Roux's operation in a certain number of cases, this being due to the fact that acid gastric juice unneutralised with bile and pancreatic juice was allowed to act on the piece of jejunum between the gastro-jejunostomy and the "end to side" implantation; still it was, he thought, very useful as a secondary operation for vicious vomiting.

The patient made a good recovery, and has never vomited since the operation.

## CORRESPONDENCE.

### FROM OUR SPECIAL CORRESPONDENTS ABROAD.

#### FRANCE.

Paris, Sept. 12th, 1909.

#### ULCERS OF THE LEG.

THE following method of treating ulcers of the leg has the advantage of allowing the patient to continue his occupation: After two or three days of wet dressings and the application of tincture of iodine, to insure as much as possible asepsy of the parts, a gauze bandage steeped in the following solution is wound around the limb:—

Oxide of zinc, 6 dr.  
Gelatin, 1½ oz.  
Glycerin, 3 oz.  
Water, 3 oz.

The bottle containing the mixture should be placed in hot water, before use, to render the contents as fluid as possible in order that the bandage may imbibe it

thoroughly. The winding should begin at the foot, and carried above the ulcer for about 3 in. A kind of gaiter is thus obtained which, in cooling, becomes firm, supple and elastic.

The bandage is renewed every two or three days where the ulcer suppurates a good deal, otherwise it need not be changed more than once a week. Before each new application the ulcer should be touched with tincture of iodine or nitrate of silver.

It may be well to mention that in order that the bandage should in no way impede walking, the patient should remain standing until it had cooled and become sufficiently stiff.

Under this treatment the ulcer heals more rapidly than by rest and the usual applications.

#### HÆMATEMESIS.

Hæmatemesis due to ulcer of the stomach is frequently a grave complication and always a source of anxiety for the patient and his friends; prompt treatment is consequently expected from the medical attendant.

The first indication is naturally absolute rest in bed with the ice-bag to the epigastrium, care being taken to interpose a piece of flannel between the ice and the skin. Absorption of liquid by the mouth will be strictly forbidden; only frequent rinsing of the mouth with ordinary water may be permitted; however, the patient may suck small pieces of ice.

To furnish to the tissues the necessary amount of water, an enema of a pint of boiled water may be given twice a day. After several days of this rigorous diet, two or three ounces of iced milk will be allowed, and the quantity gradually increased to one or two quarts.

If, on account of repeated hæmorrhage, it is necessary to continue the absolute diet for a certain prolonged period, two nutritive enemata will be ordered daily:—

Eggs (entire), No. 2.

Liquid pepton, 1 oz.

Milk, 10 oz.

Or, as recommended by Prof. Robin:—

Fresh eggs, No. 2.

Liquid pepton, 2 oz.

Salt, 30 gr.

Pepsin, 10 gr.

Laudanum, 3 drops.

Beef tea, 10 oz.

At the moment hæmatemesis occurs, a hypodermic injection of ergotin should be given and renewed two or three times in the day. In default of these injections, the following mixtures may be prescribed:—

Chloride of calcium, 1 dr.

Laudanum, 20 min.

Syrup,  $\frac{1}{2}$  oz.

Peppermint water, 4 oz.

Ergotin, 1 dr.

Gallic acid, 10 gr.

Syrup of turpentine, 5 oz.

A tablespoonful alternately every hour.

If the general symptoms are grave (tendency to fainting, weakness of the heart, small and rapid pulse, etc.), an injection of 10 or 20 oz. of artificial serum should be given, and at the same time an injection of spartein or camphorated oil.

Certain authorities, as MM. Dieulafoy, Terrier, and Hartmann, advocate prompt surgical interference in all these cases, but statistics are entirely unfavourable to this method of treatment, which should be reserved for cases which resist medical treatment, and they are few in number.

#### GERMANY.

Berlin, Sept. 12th, 1909.

#### NEURALGIA OF THE TRIGEMINUS FROM DISEASE OF THE NASAL CAVITIES.

A PAPER on this subject by Dr. Hoffmann, of Dresden, appears in the *Zeitschr. f. ärztl. Fortbild.*, 13/09.

The occurrence of neuralgia of the trigeminus from disease of the nasal cavities is due to proximity of the first and second branches of the nerve to the

cavities, and the clinical features of the affection correspond to the anatomical conditions. Neuralgias of the first branch are seen in disease of the frontal sinuses, after suppuration in the sphenoidal sinuses, and of the posterior ethmoidal labyrinth; of the second branch after suppurations of the antrum, of the sphenoidal sinuses, and lastly, those of the dental plexus in disease of the antrum. Symptomatic neuralgias generally make their appearance in connection with acute suppurations or exacerbations of chronic ones. True neuralgias are caused by chronic suppurations, and they form an independent affection. The majority of acute suppurations appear in connection with influenza.

In symptomatic neuralgias the nerve is almost always tender on pressure in typical spots—at the supra- or infra-orbital foramen. There is also frequently tenderness on pressure over the walls of the cavities. If the tenderness on pressure over the bony walls of the cavities is very pronounced, it supports a diagnosis of neuralgia caused by suppuration of the cavities. Tenderness to pressure over the head may accompany that over the bony walls of the cavities.

The pains may be constant for a long period, or regular intervals may intervene between the attacks. Intermittent neuralgia of the supra-orbital nerve is frequent, with acute and chronic exacerbations of suppurations of the frontal sinuses.

Although the tenderness on pressure over the nerves and bones in symptomatic neuralgia diminishes or ceases altogether during the free intervals, in true neuralgia it remains constant even during these periods of freedom.

Symptomatic neuralgias are caused by pressure of the nerve endings from exudations in the tissues of the mucous membranes. It is possible that from the course of the supra-orbital nerve in the roof of the orbit, and from the thinness of the walls of the frontal sinuses the nerve may be affected directly by the inflammatory process. This becomes more obvious when signs of periostitis are present.

In true neuralgias we must assume that the inflammatory process has extended to the nerve itself. In the differential diagnosis between true and symptomatic neuralgias the principal attention must be directed to the condition at the pressure points.

When the cause of neuralgia is to be sought in suppuration of the nasal cavities—in trigeminal neuralgia especially after influenza this connection must never be lost sight of—it can only be determined by a rhinological examination. Certain statements on the part of the patient indicate or point to the diagnosis: to the effect that the accompanying nasal catarrh is only on one side, and that the painful one, and the tenderness on pressure over the bone or nerve. Swellings of the soft parts or abscesses are of even greater significance. In acute suppurations of the antrum after influenza, redness, swelling, and œdema of the cheek of the side affected are sometimes met with; also œdema of the lower eyelids—symptoms that point to suppuration of the nasal cavities as the cause of the neuralgia.

If a nasal secretion points to a diagnosis of suppuration of the nasal cavities, it must also be made certain that this comes from one or more of the cavities. In chronic empyæma the discharge is usually purulent, in chronic catarrh muco-purulent; in acute empyæma the discharge is at first serous, and later on becomes muco-purulent.

How do we know that a discharge from the nose comes from one of the nasal cavities? When we find that the secretion comes from one side of the nose only, it makes one suspicious of suppuration from the cavities. If the secretion is uni- or bi-lateral, the swelling of the mucous membrane is reduced by cocaine; in this way the discharge can all be removed. When the nasal passage is free, we wait a few minutes, then if in a short time there is secretion of pus in the middle passage, or in the fissure between the middle turbinate bone and the septum, it is characteristic of suppuration of the cavities opening into the middle or upper parts of the nose. A negative result proves nothing, however. There is another simple way of determining suppuration of the nasal cavities. After

the nose has been freed from secretion, the patient is directed to take a mouthful of water into his mouth, the tube of the Politzer inflator is then passed into the corresponding nasal opening, the *alae nasi* closed well over it; the patient is then made to swallow as the ball is compressed. As the air pressure within the nose falls, any secretion in the cavities will be forced out. If this does not lead to any certainty, the parts must be illuminated by the electric light.

The prognosis is favourable in symptomatic neuralgia; it disappears with the cause. True neuralgias continue after removal of the cause, and require special treatment. In symptomatic neuralgia care must be taken that the discharges escape freely. This can be effected in various ways, first by making the patient use a spray of a solution of boracic acid and cocaine six times a day. The Politzer process is also very appropriate. Any hindrances to the outflow of the discharges (polypi) must be removed. Washing out of the cavities often gives great relief. The anti-neuralgics are also useful. The skin and bowels must also be attended to. In true neuralgia neurectomy of the nerve affected has been proposed. Extraction of the nerve, as proposed by Thiersch is better, as fewer relapses are likely to be met with after it than after simple neurectomy.

### AUSTRIA.

Vienna, Sept. 12<sup>th</sup>, 1909.

#### TUBERCULIN TEST.

DR. FRANZ, in his report to the Minister of War, gives an interesting history of the Bosnian Army, in which he had served during 1901-2. During that period he set himself the task of determining by the tuberculin injection the amount of latent tuberculosis under his supervision. Having satisfied himself that the injection in the healthy left no bad effects, he resolved to test No. 1 regiment of infantry, comprising 400 soldiers. The quantity used was from 3.5 milligrammes. He found 245, or 61 per cent., gave a positive result. In order to allow a reasonable space to intervene, the following year a smaller dose was repeated, with the result that 76 per cent. instead of 61 of the former year were positive, and only 24 negative, this was 14 per cent. more infected during a year's military service.

In the autumn of 1902 321 recruits were brought in and injected in the same manner, 1 milligramme, 2 milligrammes, and 3 milligrammes were given—104 times with the latter. 222 of these, or 68.8 per cent., gave a positive reaction, while only 31.2 per cent. were negative.

It was next decided to test a Hungarian regiment located in Vienna, where every care had been taken to isolate the suspected from the healthy; all enlarged glands, anæmic, bronchitic, and bodily weak were separated to a reserve body of men. After having taken all this precaution, 294 perfectly healthy soldiers were tested, and 248 of the number gave a positive reaction! It is to be noted these men were supposed to be taken from the strength of the nation, as their ages varied from 21 to 23 years: in the prime of life. Out of this 1,002 tested, who were retained on active service for the three following years, 46 were invalided or died from tuberculosis; in the fourth year 18 more, making a total of 64 of a tubercular loss. It is calculated that the Hungarian regiment lost 3.2 per cent. in 6 years, while the Bosnian lost 7.6 per cent. in the same period. It is still a debatable point how much tuberculin should be administered for testing the presence of the disease. Koch prescribed 10 milligrammes, but 3 seems to be sufficient. No inference can be drawn from the intensity of the reaction when the tubercular phenomena will appear. The hyperpyretic temperature and the simple constitutional disturbance may have the first symptoms of tuberculosis appearing contemporaneously; nothing can be inferred from the reaction as to the member or organ in which the tubercle will manifest itself.

#### CANCER AND WORMS.

At the last International Congress for Cancer Borrel put forward the theory of worms in the intestinal canal

as carriers of cancer. He had infected mice and guinea pigs, and found long after cancerous conditions of the stomach and bowels.

Kelling has since devoted his attention to the subject, and thinks we cannot go back fifteen or twenty years for the inception of the virus by worms in the alimentary canal. As three years is about the time of recurrence of the disease, he set himself to examine the subject more closely. He examined 1,036 males to obtain the frequency of worms in individuals between the ages of 15 years and 20. He found in this number

93 with *tænia*, or 9 per cent.,  
83 with oxyuria, or 8 per cent.,  
5 with ascarides, or 0.5 per cent.;

while 1,050 females gave

67 with *tænia*, or 6.4 per cent.,  
124 with oxyuria, or 12 per cent.,  
14 with ascarides, or 1.3 per cent.

The men have a heavier incidence of *tænia*, as they eat more raw flesh, while the females have a greater number of oxyuria from their intimate connection with children.

Next, taking the carcinoma incidence, from 193 cases he found among 150 men suffering from the disease that 14, or 9 per cent., had previously had *tænia*, 13, or 8.6 per cent., oxyuria, and none had ascarides.

Of the 43 females with cancer 4, or 9 per cent., had *tænia*, 5, or 11.6 per cent., had oxyuria, and none had ascarides. It will be seen from this that as many cancer cases have no parasites as those that have.

## LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

#### THE DECLINING BIRTH-RATE.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—“Student of Sociology,” if he refers to my letter of September 1st, may discover that I have not attributed the prosperity of Germany *solely* to their more numerous agricultural population, as he would make it appear by placing in inverted commas one or two words of mine, quite regardless of the context and its meaning. Of course there are many factors at work which determine the relative or comparative prosperity of different countries, politic and economic. However, I venture to state, without fear of contradiction, that the agricultural interests of any given community incomparably outweigh all other factors, because it is the only practical means of providing a *numerous and healthy* population, as I have often said. And in spite of this predominating advantage a country like France, so frequently referred to, does not avail itself thereof, that is their look out, and not ours. Your correspondent, however, may feel comfortable that we are a long way off from a diminishing or declining population, that is where the deaths exceed the births. Your correspondent's preachments would be much more opportune in a country, say, like New Zealand, unpopulated, but nevertheless presenting, too, a declining birth-rate. Here we have a country by illustration but recently emerged from a savage state rapidly metamorphosed into a highly civilised community. Nevertheless we read their towns are paraded by thousands of unemployed. The reason here again, I take it, is the urban population of New Zealand has too quickly outgrown its agricultural, which must obviously create unemployment and intense competition, because urban industries can only provide a limited number with both. It is certain, therefore, that any country, of whatever territorial extent, with an urban population in excess of its agricultural must, in an inverse ratio and corresponding degree, sooner or later come to grief, because, failing an adequate culture of land, there is no environment created to supply the overgrown town populations. Nowhere is this better exemplified than in our own country. Notwithstanding which your correspondent is periodically begging and praying more with emigration as an excuse.

In conclusion, Sir, your correspondent charges me with perverting facts. Can he point to one? I am sorry, moreover, he resolves not to notice my letters in future. At the same time I take his resolve as a compliment, as I think he feels instinctively the truth of what I have written, and which I trust numerous others of your readers less prejudiced may more fully appreciate. Thanking you very much for so great indulgence.

I am, Sir, yours truly,

CLEMENT H. SERS, M.R.C.S.

Brighton, September 9th, 1909.

#### MEDICINE AS A CAREER.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—The words of caution in your excellent "Educational Number" addressed to those contemplating medicine as a career are discreet, wise, and weighty, and it is satisfactory to find the subject dealt with also in a sympathetic fashion in a portion of the lay Press. An excellent article on it appears in one of our local organs—the *Daily Courier*—of to-day, September 4th, and I have seen similar utterances in at least one or two London papers. I write with forty years' experience and knowledge of the professional world, and in my opinion neither you nor your medical or lay contemporaries dwell sufficiently upon the hardships of the average doctor's life, and upon the disappointment which must surely overtake the vast majority of men who enter the profession with the sanguine hopes of youth, and imbued with the amount of worldly ambition natural to nearly all. There is, of course, always "room at the top." The men of transcendent abilities, the men with a touch of scientific genius, the men of intellectual calibre which throughout, from their earliest student days, marks them as superior to their fellows, will very often be able, without strain upon their powers, and without wealth or patronage, to make a fine position; and there is no doubt that a medical man deservedly eminent owing to such qualities is in an enviable situation. But the vast majority of us are mediocrities; we are men who, however intellectually superior to the common crowd—and a man must be that to become a well-qualified doctor—are on a pretty general level of ability. It is this class of candidate who need to have a true picture of the doctor's life set before them. And, in the first place, is it not grossly misleading to state that a candidate can become "qualified"—that is, in a position to earn a living—in five years. Most lads begin specialising for medicine in their seventeenth year at school. How many of these are able to earn a penny before the age of twenty-five? How many of them are able to gain a decent livelihood before thirty? Most men endeavour to get experience to complete their education by a hospital house-surgeoncy before starting in practice. Of course, if a man have means, and is able to invest in a partnership, he may give himself a better start; and if he have a modest fortune he may escape the ordeal of poverty (along with the necessity of "keeping up appearances") through which his less lucky brethren have to pass. In the work of his life the general practitioner is called upon almost throughout to display an amount of self-sacrifice demanded in no other calling, except it be in that of an ideal priest of the Roman Church. The doctor takes no vows of celibacy and poverty, but, if he marry, he is rarely able to place his wife in a position of comfort and security; he is more rarely able to make any provision for his own old age, or to ensure for his children education and advantages equal to those he himself enjoyed. The public, as a mass, do not properly appreciate the value of medical men, not being in the least aware of the labour needed to gain the position, although, of course, there are many exceptions. The State, whether represented by local authorities or departments of the central government, as you, Sir, so commonly point out, treats the doctor most vilely, and the law leaves him inferior in protection to the dentist and the veterinary surgeon. The example of the State in all departments in underpaying its medical officers, and in refusing them power and authority such as it confers upon other profes-

sional men in its employ, does much to lower respect for the profession among great classes of the public. I have left myself no room to discuss fully the position of the practitioner whose life is spent among the poorer classes. He, more than any other, is made unable to practice as a man of science; he is constantly being forced in action down towards the level of credulity and ignorance which characterises clients whose only knowledge of disease is derived from study of quack advertisements which fill so large a space in the columns of nearly all the cheap newspapers.

I am, Sir, yours truly,

A POOR PRACTITIONER.

Liverpool, September 4th, 1909.

#### "THE WONDERS OF ELECTRICITY."

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—Under this title and with sub-headings, "A Marvellous Machine at St. Bart's Hospital," "A Cure for Rheumatoid Arthritis," the *Pall Mall Gazette*, of Wednesday last, published an article which it is charitable to believe must have escaped the eyes of the responsible managers and editors. The article, avowedly written by a layman, serves simply to expose his ignorance of the technicalities of electrical science and of the pathology of rheumatoid arthritis. One quotation will suffice to illustrate the quality of this communication. Having first described the application of the electrode to an affected joint, it goes on thus:—"The effect is this. The portion of living flesh and bone between the electrodes is cooked—heated to almost any temperature. Do you realise this? You can be cooked until your juices albuminise, without being burnt!"

This sort of stuff we are accustomed to in the yellow press, but it seems strangely out of place in a paper which may rightly describe itself as written "by gentlemen for gentlemen." It would perhaps not call for notice were it not that the name and titles of Dr. Lewis Jones, M.D., F.R.C.P., the director of the electrical department at the hospital, are introduced in a way which might easily lead the ingenuous reader to believe that he was a party to such an indiscreet and misleading statement. It will, we doubt not, give pain to Dr. Jones and cause him some annoyance. It seems difficult to suggest any measure likely to prove effective in preventing impressionable laymen from contributing articles of the kind to newspapers, but it is not difficult to see how their publication might be easily rendered impossible in journals of standing like the *Pall Mall Gazette*.

I am, Sir, yours truly,

Ealing, W.

M.R.C.S.

[There should be some legal remedy on the part of medical men against newspapers that commit outrages of this sort upon their professional privacy.—EDITOR, M. P. AND C.]

#### SIR HENRY BURDETT AND THE ANTI-VIVISECTION HOSPITAL.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—With you, I regard the methods of the Anti-Vivisection Hospital with disgust and contempt, but—also like you—I agree that the institution has its rights. If a grant be made by the Hospital Saturday Fund to that or any other hospital, it is futile and derogatory for any member of the Council of the Sunday Fund to abuse the scientific methods of the participating medical charity, however foolish they may seem. Sir Henry Burdett has written a letter to the *Times* (September 10th), seeking to justify his term "pretentious humbug," and criticising the medical methods of the Anti-Vivisection Hospital. Be the latter right or wrong, it seems curious that a layman should take upon himself to instruct the world as to the value of scientific medical technique. Sir Henry Burdett may be speaking for the Hospital Sunday Fund in all this ill-mannered recrimination, but I—speaking as a general practitioner—altogether deny and repudiate his right to speak as an authority on

scientific medical methods, much as I disapprove of those in vogue at the Anti-Vivisection Hospital. Surely the medical profession and the medical journals can speak for themselves.

I am, Sir, yours truly,  
NE SUTOR ULTRA CREPIDAM.

London, N.

### FALSE PRETENCES IN TRADE AND MEDICINE.

*To the Editor of THE MEDICAL PRESS AND CIRCULAR.*

SIR,—At the London sessions on September 8th a firm of tobacco manufacturers were fined £10 and £220 costs for having sold, and having in their possession for sale, cigars to which a false trade description—"Havana"—was applied. The law thus deals with a class of false pretence which hardly affects anything save some Trade interests. On the other hand the law cannot, as it stands, touch the vendors of fraudulent quack medicines, the sale of which causes misery and death. In juxtaposition with the report of this cigar case in a newspaper before me there appears the advertisement of a fraudulent nostrum which "cures" at least a dozen different diseases. It contains no drug save a small quantity of aloes in each dose. Some dozen advertisements of the same kind, all demonstrated and easily demonstrable frauds, appear in the same copy of this newspaper. How long are we to wait until the law is made to deal effectually with this class of cruel swindle, and with the newspapers that knowingly derive large incomes from participating in the profits? Many papers puff these wares in editorial paragraphs.

I am, Sir, yours truly,  
A SUBURBAN PRACTITIONER.

Sept. 11th, 1909.

## SPECIAL ARTICLES.

### VITAL STATISTICS IN IRELAND.

THE report of the Registrar-General for Ireland for last year (a) is noteworthy in two facts recorded. For the first time for very many years there is an estimated increase of population, and there is a marked decrease in the death-rate from tuberculosis.

The facts relating to the former point are that the number of births registered was 102,039, and of deaths 76,891, the natural increase of population, or excess of births over deaths, being, therefore, 25,148; and that the loss by emigration amounted to 23,295 (which number is less than the number of emigrants enumerated in 1907, namely, 39,082, and also the average number—38,036—for the ten years, 1898-1907). There would, according to these figures, appear to have been an increase of 1,853 in the population on the 31st December, 1908; with respect to immigration, there is no official record.

It will be noticed that the increase of population is not due in any great degree to alterations in the birth-rate or death-rate, though the former is slightly more and the latter slightly less than the average of recent years, but to an enormous fall in the emigration rate. The average rate per 1,000 of the population for the ten years 1898-1907, was 8.6, the lowest being 7 in 1905, and the highest 10.1 in 1900. In 1908, the rate fell to 5.3. Unfortunately, the emigration figures have little relation to economic conditions in Ireland, but are governed almost entirely by the conditions in the United States of America. In fact, much of the passage money of Irish emigrants is paid for them in America by friends already settled there. The financial depression in America in 1908 is, therefore, the cause of the increase of the population of Ireland. Of the 23,295 emigrants, 10,480 were males, and 12,815 females. Of the whole number 3,547 were natives of the province of Leinster, 6,423 natives of Munster, 8,409 of Ulster, and 4,916 of Connaught.

(a) Forty-Fifth Annual Report of the Registrar-General for Ireland. Dublin: H.M. Stationery Office. 1909. [Cd. 4769]. Price 2s. 8d.

Of the total emigrants 11.1 per cent. were under 15 years of age, 81.2 per cent. were between 15 and 35 years old, and 7.7 per cent. were 35 or upwards.

The marriages registered during the year numbered 22,734. The marriage-rate was 5.20 per 1,000 of the estimated population, showing an increase of 0.06, as compared with that for the year 1907, and an increase of 0.10, as compared with the average rate for the ten years, 1898-1907; the birth-rate was 23.3 per 1,000 of the estimated population, being 0.1 above that for the preceding year, and also 0.1 above the average rate for the ten years, 1898-1907; and the death rate (17.6 per 1,000), was 0.1 under the rate for the preceding year, and 0.2 under the average rate for the ten years, 1898-1907.

Of 22,734 men married during the year, the number of minors was 377, or 1.66 per cent.; and of the women married 1,451, or 6.38 per cent., were under age. The highest proportion of husbands (2.08 per cent.) who married under age in 1908 was in the province of Ulster, and of wives (7.89 per cent.) was also in the province of Ulster. It appears that the percentage of persons married in Ireland, who were under age, is very far below the corresponding percentages in England and Scotland.

In each of the provinces of Leinster and Ulster, the highest provincial marriage rate (5.5 per 1,000 of the population, according to the Census of 1901), was recorded. The rate for Munster was 4.9 per 1,000, and that for Connaught 3.9 per 1,000. For county, or county borough areas, the highest marriage rate (7.2 per 1,000 of the population) was in the county borough of Dublin, and the lowest (3.5) in the county of Galway. Between these extremes the most favourable rates were 7.1 for the county borough of Belfast, 5.9 for the county of Dublin, and 5.3 for each of the counties of Wicklow and Antrim, and Londonderry county and county borough, and the least so were 3.7 for the county of Clare, 3.8 for the county of Mayo, and 4.1 for each of the counties of Donegal, Cavan, and Roscommon.

The births registered during the year 1908, namely, 102,039, include 52,396 boys, and 49,643 girls, or 105.5 of the former to every 100 of the latter. Of the 102,039 children, whose births were registered in Ireland during the year 1908, 99,449, or 97.5 per cent., were legitimate, and 2,590, or 2.5 per cent. were illegitimate, the latter being 0.1 below the corresponding average percentage for the preceding ten years. These results bear favourable comparison with the returns for most other countries. The number of male children born in wedlock during the year was 51,090, and of female, 48,359, or 105.6 of the former to every 100 of the latter; of the illegitimate children, 1,306 were males, and 1,284 females, being 101.7 boys to 100 girls. Of the children born in Ulster, 3.4 per cent. were illegitimate; in Leinster, the percentage was 2.6; in Munster, 2.1; and in Connaught, 0.7.

The four highest birth-rates for the county or county borough areas were 31.6 for Dublin county borough; 29.7 for Belfast county borough; 25.2 for county Kildare; and 23.3 for county Kerry. The four lowest rates were—18.3 for county Meath; 18.4 for county Roscommon; 18.5 for county Cavan; and 18.7 for King's county.

An investigation regarding multiple births was undertaken for the first time. It was found that of the total births, namely, 102,039, there were 1,198 twin births, and 10 triplets.

The six county or county borough areas having the lowest mortality rates per 1,000 of the population were:—County Mayo, 13.4; county Galway, 13.6; county Leitrim, 13.7; county Roscommon, 14.1; county Kerry, 14.2; and county Clare, 14.4. The highest rates are as follows:—Dublin county borough, 24.0; Belfast county borough, 19.4; county Carlow, 18.3; Londonderry county and county borough 18.3; county Armagh, 18.2; and county Down, 18.0.

Of the 76,891 deaths registered during the year 3,331 took place in Infirmaries and General and Special Hospitals; 1,435 in Public Lunatic Asylums; 11,268 in Workhouses and Workhouse Hospitals; and

60,857 were of persons who died "at their own homes, etc."

In the table of causes of death tuberculosis heads the list with 11,293 deaths, as against 11,679 in the previous year. Heart diseases come next with 9,020 deaths, and old age third with a little under 9,000. Until 1907 old age used to come second in the list. The change in the figures is probably due to a more accurate certification of deaths, many deaths formerly returned as due to old age being in reality due to some special disease. Of the infective diseases, omitting tuberculosis and pneumonia, the following stand highest:—Influenza with 1,798 deaths, diarrhoeal diseases with 1,199, and whooping-cough with 945. Since 1898 there has been no recorded case of hydrophobia in Ireland. The deaths from all puerperal septic diseases numbered 189, the total number of deaths associated with pregnancy or child-bearing being 615.

The number of deaths from tuberculosis was 11,293, being 386 less than in the previous year. The decrease was chiefly in the pulmonary cases.

The deaths from violence were 1,916 in number:—1,720 from accident or negligence, 48 from homicide, 147 from suicide, and 1 from execution. The accidental deaths include the deaths of 401 persons (of whom 217 were under 5 years of age), from burns, scalds, or explosions, 313 from drowning, 232 from falls, 166 caused by vehicles or horses, 115 from suffocation (of these 85 were infants under one year of age), 78 from weather agencies, 34 from poisons or poisonous vapours, and 21 from weapons and implements. Of the 48 homicidal deaths 16 were of children under 5 years of age; of the total 32 were deaths of males, and 16 of females. Of the 147 deaths by suicide, 115 were of males, and 32 were of females.

In Ireland for the whole country the death-rate of infants (97 per 1,000 births), is below that for England and Wales in 1908, namely, 121 per 1,000 births, and Scotland in 1907 (110 per 1,000). In the urban centres, however, the comparison is by no means so favourable to Ireland. In Dublin the death-rate per 1,000 births of children under one year was 146, in Belfast 147, in London 113, and in Edinburgh 122.

The Registrar-General illustrates his report by several diagrams, some of which appear for the first time. Diagram No. 4, dealing with the relations between the conjugal state and tuberculosis does not convey any meaning so far as we can make out.

A well-deserved compliment is paid to Dr. Ninian Falkner, Medical Superintendent of Statistics, for the share he has taken in the preparation of the report.

## REVIEWS OF BOOKS.

### DIET AND DIETETICS. (a)

THIS volume is divided into twenty-eight chapters, by various writers, each of which deals with a branch of the subject. The list of authors contains nineteen well-known names. Three of the collaborators are Scotch, the remainder London physicians. Sir Lauder Brunton is responsible for a very interesting Introductory Chapter, and Sir Patrick Manson and Dr. C. W. Daniels for that on "Diet in the Diseases of Hot Climates." The Editor has confined himself to Chapter XIX., "Diet in Diseases of the Lungs"; Chapter XXVI., "The Feeding of Children and Infants in Health"; Chapter XXVII., "Diet in Diseases of Children."

Dr. Sutherland is to be congratulated on the success of his undertaking. At his suggestion, contributors have given throughout the work their own views and experiences, so that in it one finds set down the principles and practice of men who have had special experience in the subject on which they write. At the

(a) "A System of Diet and Dietetics," Edited by G. A. Sutherland, M.D., F.R.C.P., Senior Physician to the Hampstead and North-West London Hospitals. London: Henry Frowde, Hodder and Stoughton. 1908.

same time the views of the leading authorities are included and critically considered. The work treats of the subject of dietary very fully, especially from a physician's point of view. There is little direct reference, however, to the more surgical side of the question—for instance, the diet of patients before or after operation. Nor is the diet during gestation particularly mentioned. In this connection a more extensive index would be a great advantage, both for those who have not leisure to read the book through, or, like ourselves, having read it, wish to refer to particular points. We have seldom dealt with a book that can be perused with greater pleasure and interest, and which is at the same time so replete with practical advice. The first nine chapters may be conveniently separated from the rest of the book, as they more or less treat of the fundamental principles of dietary. In a sense they are the most interesting and instructive part of the work, and one can obtain there a thorough insight of the significance of dietetic treatment. They deal with "The Evolution of Man's Diet," "The Physiology of Digestion," etc., "Experimental Work," "Diet Cures," "Patent and Proprietary Foods," "Alcohol," and "Artificial Alimentation." Some of the chapters necessarily contain a number of tables and some charts, which are useful for reference. The remaining chapters discuss the diet in various diseases and conditions of life. The chapter on "Diet in Tuberculosis" is particularly full and detailed, and may be taken as an example of the particular kind of information which is typical of this part of the work. In it we find the details of articles of diet for various classes of patients, arranged according to their wage-earning capacity, the approximate nutritive value of foodstuffs, their cost, and advice as to what to buy and how to cook it.

We can confidently recommend this "System of Diet and Dietetics" to members of the profession generally as a most useful addition to their libraries. The publishers, moreover, have left nothing to be desired in the printing and get-up of the book.

### THE PRACTICAL MEDICINE SERIES. (a)

THIS is the best and most practical series of year books with which we are acquainted, and the present volume will add to its reputation; but 10 volumes per annum appears to be a big investment; being American, however, further comment on the point is needless. The subjects discussed cover the whole ground of surgery, and the mode of discussion is one which renders the book of special value to the consultant and to the operating surgeon. Amongst the subjects to which special attention has been paid may be mentioned immunity, local and general; "local infiltration, hæmo- and lympho-stases, and tissue coffer-damming in acute infections"; the surgery of the heart and blood-vessels; the early removal of thrombi and emboli before gangrene takes place; and infection and contagion in cancer.

The Editor has distinct views on the administration of anaesthetics, as one may judge from the following paragraph:—"One can scarcely comprehend the degree of inefficiency with which anaesthetics are administered in many clinics and in most private practice in Great Britain, on the Continent, and in some parts of this country, unless he has been an eye-witness. With few exceptions in the European clinics, ether is given as incompletely and with as much danger as it was twenty years ago, and chloroform is continually claiming its annual wanton sacrifices, which are absolutely avoidable."

There is a good description of Trendelenburg's operation for the removal of clots from the pulmonary artery in cases of embolus. The Editor considers that it is "epoch making," but as yet it has not been performed with satisfactory results in the human

(a) "The Practical Medical Series." Comprising ten volumes of the year's progress in Medicine and Surgery. Under the general Editorial charge of Gustavus P. Head, M.D., Professor of Laryngology and Rhinology, Chicago Post-Graduate Medical School. Vol. II., General Surgery. Edited by John B. Murphy, M.D., LL.D., Professor of Surgery in the North-West University, etc., etc. Series 1909. Pp. 617. Chicago: The Year-Book Publishers. Agents for Great Britain: Gillies and Co., Glasgow.



subject. In the third case operated on by Trendelenburg, clots were removed and the artery successfully closed, but the patient died about 40 hours later, and at the autopsy more clots were found in both arteries. The suture of the artery was tight, and there was no blood in the pericardium. The removal of clots from arteries seems to offer more hope of success in cases of beginning gangrene of limbs. In pulmonary embolus the condition of the patient is usually so critical that even though the operation may be mechanically perfect, it seems hopeless to look for recovery.

#### OPERATIVE SURGERY. (a)

THE present or third edition of Bickham's "Operative Surgery" has been enlarged by over 200 pages and nearly 300 illustrations. The additional pages include 106 operations which were not in the last edition. The author intends his work to supply practitioners and students with an account of the technic used by modern surgeons in the numerous operations described in the text. The author rightly lays stress on the importance of a sound anatomical knowledge of the parts in operative work. He has therefore devoted a great deal of attention to descriptive and surgical anatomy. The clinical aspect of the question is only considered in a general way. The work is suitably arranged for easy reference. Part I., "The Operations of General Surgery," describes amputations and operations on arteries, bones, joints, etc. Part II., "The Operations of Special Surgery," deals with special organs and regions, as the male and female genital organs, the head, thorax, etc. In both parts the headings under which the subject is discussed are the same.

American surgical text-books, in our experience, are sometimes little more than indifferent atlases, with a scanty text, printed in large type, containing the minimum of useful information. The principal object in view seems to be to crowd in an illustration on the smallest pretext, and to make the book as bulky as possible. We have therefore the more pleasure in welcoming a new edition of this really sound work. In it the reader has not only an excellent operative surgery, but a practical and reliable surgical anatomy. The illustrations are good and efficient; the printing and general arrangement leave nothing to be desired. The author must have expended an enormous amount of labour and care in writing the subject-matter, but he is well repaid by the result. The text is full, detailed, and lucid, and describes very numerous useful and up-to-date operations. The preponderance of the more recent ones have been devised by American surgeons. Very few classical operations now in use are not dealt with. We notice in the account of entero-enterostomy by simple suture, the technic in which the posterior serous suture is first inserted is not mentioned. (It is true that technic is subsequently described under gastro-enterostomy.) The author's method is by simple continuous overhand stitching of all coats, followed by interrupted Lembert sutures of outer coats. On the whole, however, the author has utilised the space at his disposal to the best advantage. The greatest objection to the book is one of pounds and ounces. It is heavy and cumbersome.

#### PHYSICAL EDUCATION. (a)

PERHAPS one of the most remarkable characteristics of the last century was the systematic or even organised neglect of physical education. It is true that in the larger public schools of both Great Britain and Ireland much time was devoted to games, and the playing of those games resulted in much benefit to the physical health of the players. Though this was so, school authorities can claim little credit for the result. One of two courses was usually adopted by such authorities—either they enforced universal participation in such games by the pupils, and so did irreparable damage to the health of many who were

physically unfit for them, or they left the participation in and regulation of such games entirely to the discretion of the boys themselves. In girls' schools physical education was, as a rule, considered "unlady-like." To teachers and parents alike physical culture had no place in the connotation of the term education. Within the last twenty years matters have changed very considerably, but we are still very far from having as true a conception of what education means as Plato had. To anyone who will read the admirable introductory chapter to the book before us by Professor J. Welpton on the history of physical education, the truth of the statement here made will be very apparent. Until those who are responsible for the education of our youth return to some such just conception of their responsibilities as Plato had, there can be little hope of progress. Our author seems to have grasped this conception, and his book will, we believe and hope, help materially in a widespread realisation of it. The popular exposition which our author gives of the anatomy and physiology of the human body is really admirable, and may be read with pleasure and profit by anyone. If only those who are responsible for the condition of our national and primary schools throughout the country, would study the admirable instruction in school hygiene which our author gives, we should very soon hear much less of the physical degeneration of the race. The idea of attempting education in the true sense under the conditions present in many of our schools would be ludicrous were it not that it is so serious. We must thank Dr. Welpton for his book, and sincerely wish that we could ensure that the study of it should become universal throughout the country.

### LABORATORY NOTES.

#### MILK STOUT.

THE physician has constantly to emphasise the necessity for taking additional nutriment, and when a revulsion to an increase in bulk of solid food is apparent the plan of enhancing the nutrient value of existing articles of diet is constantly resorted to. Where no compunction need be felt against the prescription of malt liquors, we would direct attention to this "milk stout," which is made by Messrs. Mackeson and Co., Limited, of Hythe, Kent. In so far as our analysis shows the absence of fat, the term "milk" must be considered in a restricted sense, and it would probably be a difficult matter to prepare a palatable stout in which the ingredients of whole milk were incorporated. This stout, however, contains the carbohydrates of milk, which very considerably increase the nutrient value, without the additional quantity of extractives being apparent to the taste. The stout has an excellent flavour, and is likely to be much appreciated by patients.

Our analysis shows it to have the following composition:—

Extractives	...	...	9.60 per cent.
Mineral matter	...	...	0.35 "
Alcohol (by volume)	...	...	6.17 "
" (as proof spirit)	...	...	10.81 "
Fixed acid (as lactic acid)	...	...	0.07 "
Volatile acid (as acetic acid)	...	...	0.11 "

### MEDICAL NEWS IN BRIEF.

#### Medicine Stamp Duty.

In the House of Commons, on Thursday last, Captain Craig asked the Secretary to the Treasury what was the amount of revenue derived from the duties on quack medicines in the years 1905-6, 1906-7, and 1907-8 respectively.

Mr. Hobhouse replied that the amounts of revenue derived from the medicine stamp duty, to which I take the hon. member to refer, in the years 1905-6, 1906-7, and 1907-8 were £324,112, £327,106, and £334,142 respectively.

(a) "A Text-Book of Operative Surgery." By M. S. Bickham, M.D., F.R.C.S., Junior Surgeon, Touro Hospital, New Orleans; late Surgeon, Manhattan Hospital, New York, &c. &c. Third Edition. Pp. 1208. 854 illustrations. Philadelphia: W. B. Saunders Co. 1908.  
(b) "Principles and Methods of Physical Education and Hygiene." By W. P. Welpton, B.Sc. Octavo, pp. xix. and 401. London: W. B. Clive, University Tutorial Press, Ltd. 1908.

Captain Craig: Is this extraordinary increase in quack medicines to be attributed to a certain extent to the fact that the label put on the bottles by the Government to collect the duty is taken by certain people among the poorer classes to mean that the contents have the Government approval?

Mr. Hobhouse: I do not think so. There is no extraordinary increase, only from £324,112 to £334,142.

Captain Craig: That is an increase of £10,000 on duty alone on the sale of these medicines.

#### Important Prosecution of a Nurse at Exeter.

A CASE of considerable importance came recently before the magistrates at the Exeter Police Court, when Alice J. Bowden was summoned for exposing, before disinfection, clothing which had been used in connection with an infectious disorder.

Mr. C. T. Proctor (Deputy Town Clerk) stated that Mrs. Bowden was a widow, who had been nursing a child, at Alphington Street, suffering from scarlet fever, and went to her home every evening without changing her clothes. She had a son residing at home, who was engaged at a large draper's establishment; a daughter, who washed clothes for a large institution, and another one who went home every night for about two hours.

The Magistrates' Clerk: What is the remedy?

Mr. Proctor: Change her clothes, or disinfect herself, before leaving the house of the patient.

Continuing, Mr. Proctor said a person who exposed such clothing without disinfection was liable to a penalty not exceeding £5.

Defendant said she did not think she would do any harm by leaving the house; had she known, she would not have done so, and would have stayed there, as she had done since Monday.

The Chairman of the Bench (Mr. Stocker) said nurses were expected to have sufficient knowledge of what was required to protect other people from infection. She would be fined 10s. He hoped the case would be a warning to other people.

#### International Medical Congress, Budapest.

IN connection with the International Medical Congress held at Budapest, an exhibition of drugs, chemicals, medical and pharmaceutical appliances, arranged at the Zander Institute by Burroughs Wellcome and Co., attracted considerable attention. The exhibit included a selection of "Tabloid" and "Soloid" products of special interest to medical practitioners, and other scientific workers "Tabloid" first-aid equipments, "Tabloid" photographic chemicals and specimens of all the newer preparations of the firm were on view.

#### The Cholera in Russia.

THE City Councillors of St. Petersburg, after a stormy night sitting, have resolved upon the immediate construction of additional filters on the plans and terms offered by the firm of Siemens and Halske. The only other competitor was a Russian firm. Cholera continues to claim an average of 25 victims daily. The total for the year is 5,769 deaths, of which 88 per cent. are among the working classes. Preventive inoculation was applied to 53,162 inhabitants, of whom only 12 contracted the disease, and 8 of these recovered. A telegram from Pskoff reports that riots have taken place among the peasantry in connection with the outbreak of cholera there. The peasants destroyed the cholera wards of the hospitals and assaulted doctors. The constabulary have been sent to quell the disturbance. The Pskoff peasants are notoriously the most backward in all Russia.—*Times*.

#### Hospital Dilemma in Salford.

A SINGULAR situation has arisen in Salford as a result of the termination of his engagement by Dr. Buchanan, senior resident medical officer of the workhouse hospital after 4½ years' service. The guardians advertised for a successor to Dr. Buchanan, but there was not a single applicant for the position. This is believed to be due to the attitude assumed by the British Medical Association, in view of the fact that the guardians are proposing to reduce the status of

the senior officer, and are advertising the post at £150 per annum, or £70 less than Dr. Buchanan received, whereas Dr. McVail, in the report of the Royal Commission, stated that with 500 patients in the institution he was of opinion that the medical staff was insufficient, and that the work seemed bound to be rushed, while only a few weeks ago Mr. Lowry, the Local Government Board inspector, pointed out the necessity for increasing the medical staff, which hitherto consisted of two resident medical officers and a visiting medical officer.—*Standard*.

#### Two Attendants Dismissed from Hope Hospital, Manchester.

THE ill-treatment of a sane epileptic patient in the Hope Hospital of the Salford Poor-law Union was considered at a recent meeting of the Visiting Committee. The patient, through a relative, complained that an attendant named Clark had struck him, dragged him from a ward, and had "nearly strangled him." The attendant Clark said the patient had refused to do certain work, and had thrown himself on the floor. Clark's statement was corroborated by Mr. Perkins, head attendant.

Henderson, another attendant, said that he set the man to work, and that Clark interfered, telling the man to "take no notice of that officer," and as the man refused to go, Henderson alleged that Clark struck the patient and dragged him into the corridor.

Henderson said that he only gave evidence because there was bad blood between him and Clark.

Mr. Byrne asked if that had influenced his evidence?

The Attendant: Yes, it has done so.

Mr. Byrne: In what way has it influenced you?

Henderson: If it had not been for that I should have kept my mouth shut.

Mr. J. P. Byrne moved, after the attendants left the room, that both should be dismissed, and Mr. Shutt seconded the resolution, which was carried.

#### The Feeding and Care of Infants.

WE have been favoured with a large printed card containing some practical directions as to the feeding and care of infants. It is issued by the National League for Physical Education and Improvement, which has its headquarters at 11 Southampton Row, London, W.C. The card is one of the most trustworthy and sound that we remember to have seen. The cards are excellent for the nursery or for the out-patient room, and would be found useful by health visitors. They are to be bought at 11d. per dozen.

#### Statue to the Memory of Sir James McGrigor, M.D.

IN September, 1865, a statue by Noble was erected in the Ranelagh Gardens, Chelsea Hospital, in memory of Sir James McGrigor, the first Director-General of the Army Medical Department. For some time it was felt that the new Royal Army Medical College, Grosvenor Road, would be a more fitting place for this memorial of an officer whose career was so greatly associated with the Army and the advancement of medical science. Accordingly, permission was obtained from the authorities concerned, and the statue has been re-erected on a site in the grounds of the college on the north-east side facing the Tate Gallery. The cost has been defrayed by the officers of the Royal Army Medical Corps.

#### Medical Congress at Budapest.

THE International Medical Congress came to an end on the 5th inst. A telegram was sent to King Edward, notifying his Majesty of the acceptance of the invitation to hold the next congress in London, and conveying the most respectful thanks of the congress. A similar despatch was sent at the same time to Sir Edward Grey.

THE will, just proved, of the late Mr. Richard Vincent Coleman, of The Shrubbery, Buckland, Dover, who left gross estate £41,383, with net personalty £33,269, provides that his residence shall be used as a convalescent home, either in connection with the Royal Victoria Hospital, Dover, or otherwise, as his trustees shall think fit. The ultimate residue of his property—about £25,000—is left as an endowment for the home.

## NOTICES TO CORRESPONDENTS, &c.

**CORRESPONDENTS** requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

### SUBSCRIPTIONS.

SUBSCRIPTIONS may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s.; post free at home or abroad. Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially-appointed agents. Indian subscriptions are Rs 15.12. Messrs. Dawson and Sons are our special agents for Canada.

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ORIGINAL ARTICLES OR LETTERS intended for publication should be written on one side of the paper only and must be authenticated with the name and address of the writer, not necessarily for publication but as evidence of identity.

### PLAGUE IN THE PUNJAB

**SURGEON-MAJOR MCN.**—The following question and answer in the House of Commons comes in the nick of time for your information. Mr. Rees asked the Under-Secretary for India whether the returns of plague mortality in the Punjab during the preceding years indicated that the disease was gradually disappearing; and how last year's death-rate on this account compared with that from small-pox.—The Master of Elibank (Peebles and Selkirk, Min.): The plague mortality in the Punjab in 1908, excluding native States, is given in the most recent returns as 30,708, against 608,685 in 1907. The death-rate from plague in that province in 1908 was 1.53 per thousand; that for small-pox was 1.42 per thousand.

**MR. J. WILBERFORCE.**—The company, as its name suggests is of American origin. Fortunately, its existence here has been brief, as its pretentious humbug appeared not to catch on with the public as have so many other quack nostrums, and we understand its affairs are about to be wound up in bankruptcy. Thanks for your congratulations. We think this journal had something to do with the result.

### BEECHAM'S PILLS.

INTERLOCUTORY injunctions to restrain certain chemists from selling pills as "Beecham's" which were not of his manufacture, came before Mr. Justice Dodd in the King's Bench, a few days ago. We are, of course, precluded from comment on the case while *sub judice*, but the following is the description of these pills in the British Medical Association's report on "Secret Remedies":—"A box of these pills, advertised to be worth a guinea, is sold for 1s. 1½d., and the prime cost of the ingredients of the 56 pills it contains is about half a farthing. In a circular wrapped round the box it is stated that 'these renowned pills are composed entirely of Medicinal Herbs,' and cure constipation, headache, dizziness or swimming in the head, wind, pain, and spasms at the stomach, pains in the back, restlessness, insomnia, indigestion, want of appetite, fullness after meals, vomiting, sickness of the stomach, bilious or liver complaints, sick headaches, cold chills, flushings of heat, lowness of spirits, and all nervous affections, scurvy and scorbutic affections, pimples and blotches on the skin, bad legs, ulcers, wounds, maladies of indiscretion, kidney and urinary disorders, and menstrual derangements. The pills had an average weight of 1½ grains, and analysis showed them to consist of aloes, ginger and soap; no other medicinal ingredient was found. The quantities were approximately as follows:

Aloes	0.5 grains.
Powdered ginger	0.55 "
Powdered soap	0.18 "

In one pill."

This analysis is confirmed by that previously published by the Australian Royal Commission.

**A VEGETARIAN.**—Spinach has been found on analysis to contain a larger quantity of iron than any other vegetable; cabbage and endive coming next respectively.

**H. S. M.**—All the English medical schools commence the winter course the first week in October. You will find your other questions answered on reference to our "Educational Number."

### THE THERMOS FLASK.

WE are asked to state that Lieut. Shackleton has testified to the fact that this marvellous flask helped him to perform his wonderful feat in reaching the South Pole, and that a telegram from America has just been received, giving the information that Dr. Cook found these flasks "life-savers" at the North Pole.

**F. E. F. (Ealing).**—There is little fear of cholera obtaining any real footing in England. However, isolated cases may occur anywhere, and it is the duty of every practitioner to be on the alert. Meanwhile, it is reassuring to know that special precautions are being taken by Dr. Williams, the medical officer of the Port of London, for the prevention of the introduction of cholera into the metropolis. The real anxiety is as to the spread of the disease in the ports of Holland, and particularly

at Rotterdam, which is daily in close contact with London, not only by the passenger steamers but by a large number of cargo boats.

## Vacancies.

**Gorey Union.**—Medical Officer for the Camolin Dispensary District. Salary £120 per annum, with Registration and Vaccination Fees, etc. Immediate application to B. Creighton, Clerk of Union. (See advt.)

**Fermanagh County Hospital, Enniskillen.**—House Surgeon (Anæsthetics). Salary £72 per annum. Applications to C. Wilson, Secretary. (See advt.)

**Devon County Asylum.**—Third Assistant Medical Officer. Salary £140 per annum, with board, apartments, and laundry. Applications to Medical Superintendent, Exminster.

**British Ophthalmic Hospital at Jerusalem.**—Assistant Surgeon. Salary £300 per annum, with house. Applications to the Honorary Secretary, British Ophthalmic Hospital, St. John's Gate, Clerkenwell, London, E.C.

**Newcastle-on-Tyne Dispensary.**—Visiting Medical Assistant. Salary £160 per annum. Applications to the Hon. Secretary, Joseph Carr, Chartered Accountant, 26 Mosley Street, Newcastle-on-Tyne.

**Manchester Royal Infirmary.**—Resident Surgical Officer. Salary £150 per annum, with board and residence. Applications to Walter G. Carr, General Superintendent and Secretary, Manchester Royal Infirmary.

**Prestwich Union.**—Assistant Medical Officer. Salary £140 per annum, together with furnished apartments, rations, etc. Applications to Edward W. Ogden, Clerk to the Guardians, Union Offices, Cheetham Hill Road, Manchester.

## Appointments.

**BRICK, MICHAEL, L.R.C.P. and S.Irel.**, Certifying Surgeon under the Factory and Workshop Act for the Tralee District of the county of Kerry.

**BRICE, THOMAS H., M.D. Edin., F.F.P.S. Glasg.**, Regius Professor of Anatomy in the University of Glasgow.

**CORFIELD, WALTER FRANCIS, M.B., B.S. Lond.**, Medical Officer of Health of Colchester.

**EMERSON, J. J., L.R.C.P. and S.Irel.**, Certifying Surgeon under the Factory and Workshop Act for the Enno District of Queen's County.

**FORREST, MARGARET G., M.B. Glasg.**, Assistant Medical Officer at the Bucknall Fever Hospital, Stoke-on-Trent, Staffordshire.

**GREGG, C. C., M.B., C.M. Aberd.**, Certifying Surgeon under the Factory and Workshop Act for the Fyvie District of the county of Aberdeen.

**HIGGINS, T. F., L.R.C.P. F.R.C.S. Irel.**, Certifying Surgeon under the Factory and Workshop Act for the Stradbally District of Queen's County.

**LEA, JAMES, M.B., B.C. Cantab.**, Certifying Surgeon under the Factory and Workshop Act for the Chorley District of the county of Lancashire.

**MC FARLAN, WILLIAM MOREHEAD, M.D., Ch.B. Edin.**, District Medical Officer by the Basingstoke (Hants) Board of Guardians.

**SUTHERLAND, HALLIDAY G., M.D. Edin.**, Medical Superintendent of the Westmoreland Sanatorium, Grange-over-Sands.

**WALLACE, D., M.B., C.M. Edin., M.R.C.S. Eng., F.R.C.S. Edin.**, Certifying Surgeon under the Factory and Workshop Act for the Creetown District of the county of Kirkcudbright.

## Births.

**AIDISON.**—On Sept. 7th., at Northwood, the wife of Christopher Addison, M.D., F.R.C.S., of a son.

**BECKETT-OVERY.**—On September 8th, at 99 Cromwell Road (Nursing Home), South Kensington, the wife of H. Beckett-Overy, M.D. Ed., F.R.C.S. Eng., of a daughter.

**CREAN.**—On September 9th, at 13 Queen Street, Mayfair, the wife of Thomas J. Crean, V.C., F.R.C.S., of a son (still-born).

**SELEY.**—On Sept. 10th, at 13 Hall Gate, Doncaster, the wife of E. Wallace Selby, M.D. Lond., F.R.C.S., of a son.

**SHORE.**—On Sept. 11th, at Byron's Lodge, Grantchester, Cambridge, the wife of Lewis E. Shore, M.A., M.D. Cantab., Fellow of St. John's College, Cambridge, of a son.

## Marriages.

**EPWORTH-JACKSON.**—On Sept. 8th, at the Parish Church, Hoxham, Norfolk, Frank Arthur Epworth, M.B., F.R.C.S., of Rotherham, son of B. G. Hepworth, Esq., of Dewsbury, to Hilda Constance, daughter of the late Edward Steane Jackson, M.A., of Plymouth.

**MALINS-BALDWIN.**—On Sept. 7th, at St. Nicholas' Church, Warwick, Herbert Malins, B.A., M.B., F.R.C.S., second son of Edward Malins, M.D., of Birmingham, to Florence May, eldest daughter of Harry S. Baldwin, Ashberry House, Warwick.

## Deaths.

**BRIDGWATER.**—On Sept. 8th, at Uckfield, Thomas Bridgwater, J.P., LL.D., M.B., for 35 years one of the medical officers to Harrow School, aged 85.

**PENHALL.**—On Sept. 10th, at "The Cedars," Broadwas-on-Teme, Worcester, Sophia, the beloved wife of John Thomas Penhall, M.D., formerly of St. Leonards-on-Sea.

# THE MEDICAL PRESS AND CIRCULAR.

"SALUS POPULI SUPREMA LEX."

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WEDNESDAY, SEPTEMBER 22, 1909.

No. 12.

## NOTES AND COMMENTS.

### Another Christian Science Victim.

OF all forms of unqualified practice that of so-called Christian Science is perhaps the most revolting, inasmuch as it seeks its victims under the guise of the highest principles of morality the world has yet known. It is to be hoped that this foolish cult will ere long be banished from our midst with the rest of the impostures that are born of greed and bred upon ignorance. Meanwhile Christian Science has to be dealt with as a deadly menace to society. Elsewhere in our columns we publish an account of a recent inquest, held at Worthing, upon the body of an unfortunate widow who died of hæmorrhage from a phthisical lung while under the care of a Christian Scientist. The evidence showed that the poor woman had been under the care of a London physician, but, acting under the advice of a sister, she had placed herself in the hands of a local Christian Scientist, with whom arrangements for a course of treatment were made. The sum of five shillings a week was paid for the precious ministration, which consisted of prayers twice daily. As well might it be expected to turn the stars in their courses by supplication of the kind as to influence thereby the course of a disease like consumption controlled by natural physical and pathological laws. On the other hand, it is well known that many cases of pulmonary tuberculosis may nowadays be treated by proper medical treatment.

### The Price of the "Work."

ONE of the most extraordinary features of this case, and one that lets a flood of light upon the mercenary motives of the followers of Christian Science, was the remark of the operator in this case, to the effect that "a good deal of work was not charged for." That points to the deliberate prostitution of a sacred function to the base level of a means of gaining a livelihood. If the Christian Scientist be logical he will establish a standard price for his "work"—so many prayers, so many pence, shillings or pounds, according to the credulity and the depth of pocket of his dupes. But what has the State to say of the lives that are sacrificed to this blatant form of unqualified medical practice? What have the General Medical Council to say to the Privy Council as to the desirability of substituting prayer for physic? Lastly, what have the Royal College of Physicians to say to the sacrificing of lives by these "false practitioners," whom, by the terms of their original Charter, they are bound to proceed against? The terms of that Charter of Henry VIII. have been repeatedly confirmed by Parliament up to the Medical Act of 1858. If the General Medical Council cannot prosecute, why do they not press the Royal Col-

lege, which has had the fullest powers (in London and 7 miles round) for several hundred years?

### Blindness Among Infants.

IT is stated that the authorities of five of the chief Staffordshire pottery towns, having made application to the Local Government Board, have been permitted to include *ophthalmia neonatorum*—purulent conjunctivitis—among diseases compulsorily notifiable under the Act. The fact that this disease is not notifiable generally throughout the country is deplorable. Like so many others of the sanitary measures enacted during past years, the Notification Act is largely disregarded by authorities. The Act declares that they "may," not that they "shall," adopt its provisions; and from apathy, slackness, or parsimony, they too often, to a greater or less extent, neglect it. It is estimated that of the cases blind from childhood one-third are owing to conjunctivitis of the new-born. Notification of this disease, when the Act is adopted, is not only obligatory upon the medical attendant, but upon the head of the family, and perhaps, what is most important, upon the midwife. With prompt and efficient treatment, the eyesight, even in a majority of cases including the most virulent, can, as every practitioner is aware, be saved. Perhaps, when the results of a year's action in the Potteries are made known, the example may be followed in other localities where, among a vast, poor, and too often ignorant populace, application of all the laws devised for the preservation of the health of infants and children is most urgently called for.

### Medical Progress.

"THE less one knows about the past, the more one is sure that the present represents great progress over what has been accomplished." . . . "The more one goes back to the story of the past, the more does one realise that human history is a series of discoveries followed by forgettings and then re-discoveries." The truth of these two statements is well illustrated by instances taken from the history of medicine. Professor Walsh, of New York, in a paper read before the Johns Hopkins Historical Club (*Johns Hopkins Hospital Bulletin*, July, 1909), quotes sufficient instances to show that there were great schools even before Johns Hopkins. A law of the Emperor Frederick II., of the year 1241, commanded, as the curriculum of study for a young physician, three years spent in the study of logic, followed by four of medical study. At the end of that time the graduate was to spend a year in practice, "with advice and under the direction of an experienced physician," before venturing to practice independ-

ently. This is a much higher standard of medical education than was in vogue six centuries later. In surgical work, De Chauliac, in the fourteenth century, forestalled modern abdominal surgery. He opened the abdomen in order to stitch wounds of the intestine, described a method of suture, and invented a needle-holder. A print of the thirteenth century represents a surgeon operating for hernia with the patient in the Trendelenburg position. This highly developed surgery was rendered possible by the use of anaesthetics, the preparation in most common use being a combination of opium and mandragora. Facts such as these are a useful corrective to our high opinion of our own importance in the world, and Dr. Walsh does a good service in bringing them to our notice.

#### Some Plans of the Entomological Committee.

It is announced, regarding the research committee of economic entomology, that arrangements are being made with the view of sending a skilled entomologist both to West and to East Tropical Africa. These officials are desired not only to make collections, but to instruct residents in the use of scientific methods. In that way it is hoped that a large mass of accumulated facts will be one day available as the basis for extended observation and study. We are glad to gather that the scope of the work will not necessarily be restricted to Africa. This departure of the Government marks a new era in medical science which we hail with feelings of the liveliest satisfaction. The principle involved is the recognition of the duty of the State to further all knowledge that tends to make the world healthier and safer from disease. It is to be hoped that what the British Government is doing in Africa to-day it may be doing to-morrow at home, and thus the adequate endowment of medical science will become an accomplished fact. There are a host of familiar, but wholly obscure, conditions of disease in the British Islands that await investigation. Rheumatism and whooping-cough, to take two examples, although they lack romance, are hardly less deadly in their way than malaria and sleeping sickness. If we are ever to have a Government that will deal logically with urgent social wants, the endowment of medical research will probably be one of its first steps.

## LEADING ARTICLES.

### A SELECT COMMITTEE ON PATENT MEDICINES.

AFTER years of incessant protest against the evils of the trade in secret remedies the views so long advocated by THE MEDICAL PRESS AND CIRCULAR appear to be nearing a successful issue. The General Medical Council have so far taken up the subject as to press upon Government the desirability of a Royal Commission upon irregular medical practice. That they should not have specifically included patent medicines is to be regretted, because the evils due to the use of secret remedies pure and simple, that is, without the mediation of an unqualified person posing as a medical adviser is probably infinitely greater than the train of human miseries and disaster which follows in the track of the false medical practitioner. Logically, however, the question of irregular medical practice must include the consideration of secret remedies, inasmuch as the greater includes

the less. There could hardly be a clearer instance of unqualified practice than that of a man who professes to cure certain diseases by the sale of a certain nostrum. He is taking money on the strength of a promise which, from the scientific point of view, it is impossible he can fulfil. If a transaction of that kind be not irregular medical practice then we may reasonably demand from the State, in whose hands the control of social contracts is vested, a rigid definition of what is legitimate and what is illegitimate. These and other subsidiary matters, however, will have to be threshed out sooner or later in the full light of official inquiry. On Thursday last, September 16th, the Home Secretary practically promised the appointment of a Select Committee next session to inquire into the sale of patent medicines. This important announcement was made in response to a question addressed to him by Captain Craig, who has on previous occasions shown a practical interest in the question. He asked the Home Secretary whether he would consider the advisability of issuing regulations making it compulsory on all manufacturers of medicines liable to patent medicine duty to print on the label on the bottle, or other vessel in which such is sold, the full ingredients of such bottles or vessels, as well as the diseases they purport to cure; whether he would consider the advisability of increasing the size of the lettering of the Government stamp as a further precaution against ignorant people believing that the contents are guaranteed by Government? In answering, Mr. Herbert Gladstone said he was in communication with the Privy Council with reference to the point in the first part of the question, and he was disposed to think the matter of sufficient importance to require an inquiry by a Select Committee next session. New designs for stamps and labels had recently been adopted, and were being prepared, which would clearly indicate that the stamp *did not* imply a Government guarantee. Although in making this statement Mr. Gladstone was careful not to commit himself to any definite action, yet the terms of his answer are most encouraging, for they show that the question of quackery has at length been forced into the field of practical politics. It is to be regretted that it was left to a lay member of the House of Commons to call attention to the matter, in spite of the fact that there are a fair number of strong and well informed medical men in Parliament. At the same time one may recall the services of medical members of Parliament in the past and the certainty that when the call for action comes they will not be failing in their duty. For our own part we regret exceedingly that the question of the sale of patent medicines has not been deemed worthy of the appointment of a Royal Commission. We further regret that the tenour of Mr. Herbert Gladstone's answer points to the retention of the patent medicine tax, which we regard as a mean and disastrous dealing with an unclean thing on the part of the State. If the evils of secret medicine trading are as vast and far reaching as we think them to be, then they should be swept off the face of the earth, instead of giving

them the protection of the State in return for a paltry stamp revenue. Lastly, we commend to the medical profession the careful consideration of the fact that the Home Secretary refers matters concerning quacks and quackery to the Privy Council, and that the General Medical Council is closely connected with, and presumably guides and directs, the policy of the Privy Council. This is an important official acknowledgment of the relation of the General Medical Council to the Government—and it is to be hoped that the medical profession will in future keep steadily in view the fact that all matters of medico-social bearing are referred by the Government to the Privy Council, which is practically the mouthpiece of the General Medical Council. Henceforth, the plea of the latter body that they have not powers to deal with this or that matter therefore falls to the ground. The Home Secretary, in open Parliament, has made the statement that he has referred to the General Medical Council a matter involving the protection of the public against patent medicines, that is to say, he has consulted the Council on a matter they have hitherto regarded as outside their field of activity.

#### HEALTH IN INDIA.

THE usual Report on the public health in India, for the year 1907-8, which was issued last week in the form of a Parliamentary paper, affords, as these reports nowadays almost invariably do, most satisfactory reading. Improvement in the health of the European population has made truly enormous progress during the last three or four decades. This has been, in the first place, due largely to the wiser habits of life, which have been gradually adopted by all classes, military and civil. It is impossible to estimate the amount of "Indian liver," which has been put an end to merely by a more rational dietary, including far smaller quantities of beer, and brandy and soda, than used formerly to be considered indispensable. In spite of the fact that excessive dram-drinking still prevails to some extent among the rank and file of the British troops, the death-rate for the year from diseases of the liver was only 1.01 per 1,000, against 1.52 of the previous report. Pure water supply has almost extinguished cholera, and has vastly reduced the amount of enteric fever; the death-rate from the latter, the principal among all causes of mortality, during the year being 2.77 per 1,000, against 3.19 in 1906. The improvement in the sites of cantonments has also produced good effects; and given a good constitution, and careful habits—or at least not reckless habits—there seems no reason why a standard of health should not be maintained in India quite as high as that possible at home. Life in India is moreover essentially an open-air life by night as well as by day, whilst the sunlight and warmth are decided enemies of diseases so prevalent at home, such as gout, rheumatism, and their allies. The number of officers from the military and civil services, or of men from civil life, who retire from India as chronic invalids, has within late years been reduced to very small proportions, and it is not too much to say that the vast majority now return at the

end of their career displaying no injurious mark upon their constitution due to their prolonged residence in a climate once thought necessarily harmful. The death-rate, both of the British and native troops, during the year was the lowest on record, although the mortality from pneumonia, the chief cause of death, among native regiments was as usual high. It contributed 31.8 per cent. of the total deaths, five times more than among the European troops, the whole death-rate being 1.99 per 1,000, against 1.56 in 1906. The difficulties, great as they may be, in safeguarding the health of native troops, are trivial compared with the question as it affects the general native population. Among these the death-rate was higher than in 1906, a total of over half a million more deaths being recorded. The increase was largely due to plague—the disease most difficult to combat among the natives. In the towns it is impossible to make sufficient impression upon insanitary surroundings, to prevent overcrowding, to reduce dirt, and to purify a surface soil saturated with the filth of a thousand years, although much is being done in all possible directions. There are besides the obstacles presented by superstition, and prejudice; but even these are to a large extent being overcome by the devoted services of the medical profession, and the army of lay helpers—paid and unpaid—by whom they are supported. In the history of British rule in India, it can hardly be possible to find a brighter page than that which narrates the vast benefits that have been conferred upon the populace by medical science, and by the self-sacrificing labours of those who have striven throughout to give practical shape to the lessons which that science has so forcibly inculcated.

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#### CURRENT TOPICS.

##### The late Dr. Cawas Lalcaca.

A TIMELY memorial of a brave deed has been issued by the Edinburgh Parsi Union in the shape of a small pamphlet giving a notice of the late Dr. Cawas Lalcaca, of Shanghai. The tragedy of his death at the Imperial Institute, on July 1st, 1909, is fresh in the minds of our countrymen. It was in the attempt to save Sir Curzon Wyllie, a popular retired Anglo-Indian official and Political A.D.C. to Lord Morley, from the murderous attack of a fanatic that he himself was fatally shot. This noble self-sacrifice formed a fitting crown for a well-spent life. Cawas Lalcaca was a member of a well-known Parsi family at Baroda, in the presidency of Bombay. In 1878 he matriculated at the Grant Medical College, Bombay, where he graduated M.B. in 1883 with first-class honours. Later he proceeded to England, where in 1885 he took the joint diploma of M.R.C.S. England and L.R.C.P. London, and in the same year he graduated M.D. of Brussels. In the following year he settled down in Shanghai, where he held several professional appointments and acquired a large practice. At the time of his death, which occurred during a visit to England, he was a leader of the Parsi community in China. The record of his career, both social and professional, is one of life-long devotion to the high



ideals of duty and to the noble traditions of the profession in which he proved so worthy an ornament. There could hardly be found a more fitting inscription for his monument than the words of Lady Curzon Wyllie:—"The brave and noble man who lost his life on the night of July 1st in trying to save my beloved husband and others."

#### **Discovery of a Mummified Body at Stamford.**

At Stamford a leaden coffin was recently discovered in the course of some drainage excavations on the site of the former Black Friars Monastery in that ancient town. The partially mummified body of a woman was found inside the coffin, with a sheep-skin document in Latin, bearing the name of Johan. It is suggested that the body is that of Joan, the "Fair Maid of Kent," widow of Thomas, Earl of Kent, who afterwards married the Black Prince, thus becoming Princess of Wales and mother of King Richard II. It is announced that the local authorities of Stamford, in their wisdom, refused burial in the local cemetery to the remains, which have been buried in a field outside the town in a wooden coffin. The fact that the mother of an English king, or, for that matter, of any other person similarly unearthed from its resting-place, is denied burial in the common cemetery or burial ground lights up with a sudden revealing flash the sordid narrowness of the modern provincial mind, especially where burial, sacerdotal or otherwise, is concerned. As a rule, there is a local medical antiquary in all old towns, whose voice is ever raised against the vandalism and the smug futilities of small-brained iconoclasts. If there were such a practitioner of medicine in the neighbourhood, doubtless he did his best to stay the desecration of the "mummified remains found in the garden at Stamford." In any event, supposing the identity of the body to be established as that of the princess, it is incredible that the State and the reigning Royal Family will permit it to lie in its present undignified position.

#### **Shakespeare's Doctors.**

It is always of interest to medical men to notice the view taken of their profession by the great men of literature. The treatment of doctors in the works of Rabelais, Molière, George Eliot, Thackeray, Trollope, to mention only a few, has often been studied, and it is hardly any wonder that the attitude of Shakespeare to our profession has more than once received attention. The subject is brought to our notice afresh by an article in the *Glasgow Medical Journal* for July, from the hand of Dr. William Findlay, better known in literary circles as "George Umber." It appears that seven doctors appear on Shakespeare's stage—Dr. Caius, in "The Merry Wives of Windsor"; Dr. Butts, in "Henry VIII."; an English doctor and a Scottish one in "Macbeth"; one in "King Lear"; Cornelius, in "Cymbeline"; and Ceremon, in "Pericles." It is satisfactory to find that Shakespeare treats these personages with dignity and consideration, in marked contrast to the ribald satire of Rabelais, and the scorn of Montaigne. Ceremon, the lord of Ephesus, and noble physician, is perhaps the most dignified of these characters, while Dr.

Caius, the French physician of Windsor, a choleric, fire-eating old gentleman, is the least so, but is nevertheless, far from being a contemptible person. The Scottish doctor in "Macbeth" is an eminently safe and shrewd practitioner, who is careful not to speak beyond his book, and though sufficiently fond of "profit," would willingly rid himself of a troublesome patient. It is an interesting suggestion, by the way, that Ceremon had his prototype in Shakespeare's own distinguished son-in-law, Dr. John Hall.

#### **Public-House Phthisis.**

THE agency of public-houses in the spread of consumption is a fairly self-evident fact. It figured somewhat prominently in a recent Report of the Medical Officer of the Woking Urban District Council, and was quoted in the local newspapers. The suggestion was warmly resented by certain members of the Council, and a discussion ensued, the result of which appears not to have materially damaged the position of the temperance party. A letter was read from Mr. John Burns remarking on the enormously disproportionate mortality among publicans and publicans' servants compared with the rest of the community. The President of the Local Government Board also pointed out that medical observation showed that alcoholic indulgence greatly lessened the resistance to attacks of disease, and that it would be difficult to find a place in which there is more indiscriminate spitting than on the floors of public-houses—and it is agreed that spitting is the chief means by which human consumption is spread. From the report of the Woking discussion we gather that the weight of objection was against the publicity, rather than against the public-house. In any case, the incident shows that the Medical Officer of Health who contemplates a tilt against the evils of alcohol will do well to see that his armour is complete and his weapons in good order before entering the lists.

#### **The London County Council and School Clinics.**

THE action of the metropolis with regard to its defective school children is of importance because of the example set to the rest of the kingdom. It is of general interest, therefore, to note the growing conviction in many quarters that the decision of the Council to avail themselves of a few of the existing voluntary charities is hardly likely to be permanent. The mass of professional opinion is dead against the arrangement, which is regarded as another wholesale deprivation of the just dues of the general practitioner. It remains to be seen whether the hospitals who have entered into the agreement with the Council will face the emphatic disapproval of the British Medical Association. The members of the honorary staff, as well as the Boards of every voluntary hospital in London have been circularised by the Association, so that there can be no plea of ignorance of the facts of the case. It would be nothing less than a catastrophe were the members of the medical staffs of certain hospitals to throw down the gage of defiance to general practitioners. The upshot would be a class warfare that would end almost inevitably in the boycotting of the consultants. As it is, the latter hold the key to the

position, for the medical work of the hospitals depends entirely on the honorary staffs. They have only to act loyally in union with the outside medical men in order to secure and consolidate the common professional interest which has suffered so much in the past from the incessant inroads of vicarious philanthropy

#### Alcoholic "Tonics."

A FEW days ago at the Westminster Police Court a firm of druggists were summoned by the Excise for having sold various alcoholic "tonics" without a licence. The prosecuting officer explained to the magistrate that there were certain wines, such as quinine, ipecacuanha, and antimony wine, which were so medicated that they could not be used as beverages, and when wines of that description were mentioned in the British Pharmacopœia, and were sold by properly registered chemists and druggists, the Inland Revenue did not interfere, provided the wines had been sold purely as medicines. The wines in question were not of that class. The presiding magistrate, Mr. Francis, said that he would never agree to impose anything more than a nominal penalty on a chemist for a *bona fide* sale of these things, and awarded only a fine of 5s. and 2s. costs on each of four summonses. Mr. Francis is one of the most experienced of London stipendiaries, and if his view is shared by his colleagues on the Bench, a great encouragement will be given to the trade in alcoholic "tonics." It has been recently shown that the great majority of these mixtures now on the market contain as much alcohol as ordinary port wine. Some of them may be compounded of fine wine with ingredients deserving to be styled tonics, but there is nothing to prevent dishonest dealers from concocting mixtures of which the alcoholic constituent is merely raw "silent" spirit. It is impossible even for a trained "palate" to discover what is the exact quality of mixtures made up with beef tea, or syrup, and flavouring materials, whilst the majority of people who consume them take them innocently as medicines, not expecting them to be very palatable; and a great many secret habitual drunkards, especially among women, use these concoctions merely to satisfy their craving. It is much easier to send to the chemist for another bottle of "tonic" than to the wineshop for a bottle of brandy; and the "tonic" need not be concealed, but can be exposed to excite the feelings of sympathetic friends. No alcoholic mixture, of any kind, ought to be prescribed without the sanction, and supervision, of a qualified medical man; and if the traffic in these preparations is to be allowed to develop unchecked, a great part of the new legislation for prevention of the evils of the drink traffic will be certainly neutralised.

#### Health of British and German Navies.

PUBLICATION of the report of the Health Department of the German Navy for the year 1907 renders possible a comparison between it and the British report for the same year. The total German naval force numbers 45,776 men, and the British 108,740. Cases of disease and injury numbered respectively 25,051 and 75,351. This gives an approximate ratio in the German record of 547, and in the

British of 693 per 1,000. The larger ratio in the British Navy is accounted for by the greater proportion of ships employed in the Tropics. It is, however, remarkable that the German ratio for ships in the Mediterranean amounts to 984 per 1,000, against 680 British. The ratios of venereal diseases show a large British excess, 124 per 1,000, against 59 German. It is stated that elaborate prophylactic measures against venereal diseases are taken in the German Navy, whilst the men in the British fleet are virtually left to take their chance—a most deplorable, and it might justly be added, disgraceful fact, which urgently calls for attention and investigation. Suicides in the German Navy amounted to 23, and in the British to 19; ratios respectively of 0.50 and 0.17 per 1,000. There seems no reason why the medical departments of the two navies should not, in this essential humane endeavour, be brought into friendly relations, so that they might together study each others problems and methods, with a view to mitigation of all influences affecting the health of their fleets. In the question of venereal disease alone it seems urgently desirable that the British authorities should make themselves fully acquainted with German methods and means of prevention.

#### PERSONAL.

A PAPER will be read at the Royal Society of Medicine by Dr. Frederick W. Hewett, M.V.O., on "The Need for Legislation in Regard to Anæsthetics and the Lines upon which it Should take Place."

THE centenary of the birth of Oliver Wendell Holmes will be celebrated by the New York Medical Society in October next. Our distinguished *confirre* was born on August 29th, 1809, in the same year as Darwin.

THE opening address of the London School of Tropical Medicine will be delivered on October 26th by Professor Osler, Regius Professor of Medicine in the University of Oxford. The American Ambassador will preside.

WE understand that Dr. R. J. Collins, Medical Superintendent of the First Aid, Home Nursing, Health, and Infant Care Classes, connected with the Education Committee of the London County Council, has resigned his position.

MRS. HENRY FAWCETT, LL.D., will give the introductory address, "On Pioneering," at the opening of the Winter Session of the London (Royal Free Hospital) School of Medicine for Women on October 1st, at 4 p.m. Mrs. Garrett-Anderson, M.D., President of the school, will preside.

DR. E. A. WILSON, of Cheltenham, who was Second Medical Officer, zoologist, and artist in the *Discovery*, has accepted the post of Medical Officer for the Captain Scott expedition to the South Pole. Dr. Wilson did some zoological work among the penguins on the occasion of his former expedition, and published a volume through the Natural History Museum.

DR. H. A. MIERS, F.R.S., Principal of the University of London, has consented to deliver the prizes to the successful students of St. Mary's Hospital Medical School, Paddington, at the opening of the Winter Session on Friday, October 1st, when the annual dinner of past and present students will be held at the Café Royal, Regent Street, at 7 o'clock the same evening.

# A CLINICAL LECTURE ON DECALCIFIED DIETARY IN ARTERIAL ATHEROMA.

By MAURICE LOEPER M.D., and XAVIER GOURAUD, M.D.

[SPECIALLY REPORTED FOR THIS JOURNAL.]

THE majority of writers on the treatment of chronic arteritis deal almost exclusively with the manifestations and morbid disturbances, which make up the clinical picture, leaving on one side the vascular lesions, which constitute its anatomical basis. Many of the published observations tend, moreover, to maintain a very regrettable confusion, for they lack the absolute criterion which can be afforded only by exact microscopical and anatomical data, and when we endeavour to deduce any therapeutical conclusions therefrom, we are apt to comprise in the same investigation all non-specific chronic arterial lesions, irrespective of their course, their extent, and their histological constitution.

The vascular walls may be the seat of necrosis and fatty degeneration, hyperplasia, inflammation lesions, and foci of calcification. Every one of these anatomical states represents a distinct morbid process, if not, indeed, a distinct disease, which, however commonly associated, must not on that account be confounded.

This distinction is necessary, not only from the experimental point of view, it is even more so from the point of view of pathological human anatomy, and Professor Teissier, in an interesting contribution, very properly observes that sclerosis and atheroma do not give rise to the same symptoms, and we may add that they do not appear to be dependent on the same pathogenesis, or to be amenable to the same measures of treatment.

We only propose, on this occasion, to discuss arterial calcification, whether present in a pure form, as is sometimes met with experimentally in certain animals, or associated with one or other of the preceding lesions, as is usually the case in man. It has been by no means proved that calcification of the arterial walls is, as suggested, a process of natural defence on the part of a weakened wall, while, on the other hand, it is obvious that the calcareous patch constitutes, *per se*, an irremediable lesion, and a danger which it is the physician's duty to limit, and, if possible, prevent.

In view of the impossibility in man, of obtaining the experimental accuracy that is afforded by anatomical examination, we are constrained, notwithstanding the objections that may be raised to this method, to work out certain pathological problems by experiments on animals.

We are acquainted with a large number of toxic products, alimentary and otherwise, which act on the vascular system and leave indelible traces of their influence (tobacco, ergotine, cayenne pepper, oxalic acid, putrefactive products, poisonous mushrooms, etc.), but we are not in a position to affirm whether or not there exist, side by side with the highly toxic products derived from our daily food, other substances, believed to be inoffensive, which may interfere with the nutrition of the blood vessels and favour the occurrence of calcification.

In a recent communication of ours, published in conjunction with Dr. Boveri, we suggested the hypothesis that one of the substances which plays such an important part in building up our tissues and maintaining their tonus, one, too, which repre-

sents the chemical substratum of atheromatous lesions, *lime*, might conceivably play a predominant part in the production of these lesions.

The researches which we have carried on for upwards of a year past appear to support this hypothesis, showing, as they do, that a rise of the calcic co-efficient may, like an increase of chloride of sodium in oedema and hydræmia, be the cause, not, indeed, of the arterial lesion, but of the precipitation of lime that follows in its wake.

Arterial tissues unquestionably display a peculiar affinity for lime. It is present therein in considerable quantities (1.20 in rabbits, 1.40 in cows, and 0.40 in man), and in this respect the only tissues that contain a larger proportion are bones and cartilage. Then, too, the accumulation of lime salts in the vessels is very obvious in animals that normally consume food rich in lime, in those fed on food to which an excess of calcareous substances has been added, and, lastly, in those in whom the proportion of calcic substances increases with age. It seems to us that the ready calcification of the arteries of the rabbit and cow, and of the vessels of the aged, whether animals or man, may well be consequent upon this accumulation.

Our recent observations showed us, moreover, that among the substances that commonly provoke atheroma (adrenalin, ergotine, and oxalic acid), a certain number lead to an increase of lime in the cardio-vascular tissues long before the slightest lesion of calcification is perceptible, even under the microscope.

With adrenalin, even after the second injection, we found 1.31 per 1,000 in lieu of 1.15 in the control animal, while with ergotine the difference is still appreciable, exceeding 10 centigrammes.

The lime retention seems further to be confirmed by the reduction in the lime eliminated in the urine and fæces, and no better evidence of this is needed than the diminution in the basic phosphates in man, following the injection of a milligramme of adrenalin, and of the total lime (0.035 instead of 0.070) after a tolerably large dose of ergotine (2 grammes).

In short, in the arterial tissues already strongly impregnated with lime under ordinary conditions, the injurious action of certain irritating substances is manifested, to begin with, by a more or less pronounced rise in the calcic co-efficient, which will be more or less rapidly followed by precipitation in a new chemical form of salts thenceforth insoluble.

The seemingly rather ingenious hypothesis which we have put forward to explain the rôle of lime in the production of atheromatous lesions is to some extent borne out by actual observation. Further proof of its accuracy appears to be afforded by two series of experiments on animals: if a large quantity of lime salts be given daily to an animal the action of small doses of arterial poisons determine very extensive lesions of calcification, and if, on the other hand, rabbits are placed on a diet poor in lime (carrots and bran) we may still get arterial lesions but with much more difficulty than in the control animals fed on cabbages, rinds and greenstuff.

We infer from what precedes that it is indispensable to limit the intake of lime to the *strict nécessaire* in drawing up the dietary for persons threatened with atheroma, and for the actually atheromatous.

At all periods of life man requires lime, but as he gets on in years the proportion actually necessary progressively diminishes. An adult should not take more than 1.10 a day, the intestinal and urinary elimination amounting to about 90 centigrammes. Elimination ought to be proportional to intake, and it is obvious that in the atheromatous, and in renal and cardiac subjects, and even in elderly persons who are merely suffering from a general slowing down of the functions, elimination is less active, and retention is more likely to occur.

With regard to the richness of various food stuffs in lime, the tables drawn up by Atwater, Balland, and Armand Gautier enable us to classify them in three groups:—

(1) Substances very rich in lime, exceeding 2 per 1,000, viz., cows' milk, cheese, eggs, onions, beans, green cabbage, and strawberries.

(2) Substances moderately rich in lime, between 1 and 2 per 1,000: mares' milk, peas, lentils, haricot beans, and cauliflower.

(3) Substances poor in lime, below 1 per 1,000, viz., bread, meat, brain, most kinds of fish, potatoes, asparagus, apples, pears, plums, cherries, etc.

With regard to drinks, wine rarely contains more than 0.30 per 1,000, but it may attain 0.20 in spring water, and as much as 0.50 in certain mineral waters, St. Galmier, Pougues, etc.

It is hardly necessary to add that the richness in lime salts of this or that food is not, *per se*, a sufficient reason to forbid it, for we must take into account not only the actual percentage but the proportion in which the food or beverage is usually consumed. The following table gives sufficiently practical data on this point:—

4 to 800 grammes of bread=	45 to 70 centigrammes of lime.
150 to 200 grammes of meat=	19 centigrammes of lime.
3 eggs=	10 to 15 centigrammes of lime.
200 grammes of milk=	40 centigrammes of lime.
160 grammes of dry vegetables=	5 centigrammes of lime.
200 grammes of green vegetables or spinach=	20 centigrammes of lime.
500 grammes of potato=	8 to 10 centigrammes of lime.
15 grammes of cheese=	8 to 10 centigrammes of lime.
90 grammes of fruit=	2 centigrammes of lime.
150 grammes of beef tea or soup=	20 to 40 centigrammes of lime.

A glance at this table shows that large amounts of milk, bread, beef-tea and green vegetables should be forbidden for atheromatous subjects. Rumpf, Carell and Senator had hesitatingly pointed to the desirability of restricting the use of some of these substances.

In drawing up a dietary we must no doubt take into account the degree of absorption, the variable assimilation of the lime contained in the food, and the ease with which it is eliminated or accumulates. The various factors are part and parcel of the nature of the calcic compounds. The bicarbonate and lactate of lime are assimilated and eliminated more readily than the sulphates and phosphates. Their presence in certain food substances increases both their absorption and their assimilation. Then too their administration in the form of diluted solutions allows them more readily to pass through the in-

testinal mucosa and through the kidney. This important question demands further investigation.

If it be desirable to impose an acalesc dietary on the atheromatous it is equally desirable to promote the elimination of lime *via* the urine, the intestine, and even by the skin. According to our estimates the normal man passes daily in the urine some 16 or 20 centigrammes of lime. Under an acalesc diet this proportion falls to 0.12 while on a milk diet it rises to 0.40 or 0.61. It also falls in almost all acute maladies except tuberculosis, nephritis and cardiopathies (as low as 0.03). Although under normal conditions the kidney does not allow lime to pass to any great extent, certain drugs are capable of stimulating its elimination; digitalis, theobromine and coffee raise the output to from 30 to 35 centigrammes, as do also very small doses of ergotine; small doses of iodine and the iodides (to 61 and even 81 centigrammes); lastly, the ingestion of considerable quantities of water and diuretic infusion notably accelerates the medicinal elimination.

The intestine is the principal emunctory for the excretion of lime. Under normal conditions the fæces contain from 46 to 60 centigrammes of lime daily. Purgatives increase this elimination. Taking into account the quantity of water taken therewith we found that an ounce of sulphate of soda increased the amount to 90 centigrammes; drastic purgatives, such as aloes, gave from 80 centigrammes to a gramme, so that in patients with an over charge of lime the use of aperients is plainly indicated.

There is not much to be said with respect to cutaneous elimination, although the scales of the epidermis always contain a very high proportion of lime. It may be noted, however, that the administration of iodine increases the proportion of lime in the skin from 0.87 to 3.28 per 1,000.

A very simple therapeutical measure which would be really curative were it not delicate and even dangerous, would be to administer substances capable of getting rid of the lime that has accumulated in the tissues or rendering soluble the lime precipitated in the atheromatous patches.

We have investigated the action of acid lemonades, iodides, and bicarbonate of soda. In spite of Ferrier's opinion, we have no hesitation in forbidding acids, even in small doses, especially for prolonged use. Their solvent action on calcified patches is more than doubtful, and, what is more, they dissolve the lime out of the bones and cartilages, thus giving rise to the presence in the soft tissues of large quantities of soluble lime salts.

In the course of our investigations we have found twice as much lime as normal in the muscles of animals taking acids. Treatment by acids is assuredly risky for it culminates in a result diametrically opposed to the one we are aiming at.

It is indeed remarkable that lactic and citric acids, which increase the proportion of lime in the soft tissues (1.40 per 1,000 in lieu of 0.52) favour the production of atheroma in animals and may even directly determine its supervention.

The anti-atheromatous action of iodine and the iodides has been the subject of a great deal of discussion. It is affirmed by some and as stoutly denied by others. We have sought to ascertain whether this drug exerted any decalcifying action which would be one of the causes of its efficacy.

We took two lots of eight guinea pigs. Of each series four were given daily 5, 10 and 20 centigrammes of iodide of potassium the four others remaining as controls. After three weeks they were killed and their organs calcined and treated in the usual way, with the following results—

(A) 0.10 and 0.20 cg. of Iodide		Controls	
Bones ...	122 per cent.	163	per cent.
Muscles ...	2.9 "	0.52	" "
(B) Iodide ... 0.05 cg.			
Bones ...	154.42 per cent.	154.25	" "
Muscles ...	1.36 "	0.57	0.52 "
Skin ...	3.28 "	0.87	" "

The iodides, therefore, almost invariably increase the proportion of lime in the soft parts and consequently in the vessels. In strong doses, indeed, they are capable of attacking the fixed lime of the bones, displacing it, it may be, into a less convenient situation.

Iodine is unquestionably a decalcifying agent, but, like the acids, its decalcifying action is in no wise elective, and it often culminates in an actual surcharge of the soft parts in lime.

We do not think that bicarbonate of soda is open to the same objections. In doses of 10 to 15 centigrammes daily, in animals, it appears to provoke a notable diminution of the amount of lime contained in the cardio-vascular tissues (0.90 in lieu of 1.10 in the rabbit) while the lime contents of the bones underwent no change.

In the regimen and treatment of prospective atheroma and the actually atheromatous it is therefore of importance to distinguish between preventive and really curative agents. Preventive medication comprises the establishment of a regimen as poor as may be in lime salts and the administration of remedies that promote the elimination, especially *via* the urine and intestine, of the *mobile* lime salts of the economy. Curative measures are vastly less effectual and may be dangerous and should never consist in the administration of acids and large doses of the iodides because these substances set the lime of bone and cartilage free, and transport it into the soft tissues, the lime co-efficient of which is thereby augmented. It is better to employ bicarbonate of soda, which, according to our experiments, is capable of removing the lime from the soft parts without touching the fixed lime in the osseous and cartilaginous structures.

**NOTE.**—*A Clinical Lecture by a well-known teacher appears in each number of this journal. The lecture for next week will be by J. Rutherford Morrison, M.B., F.R.C.S., Lecturer on Surgery in the University of Durham; Senior Surgeon to the Royal Victoria Infirmary, Newcastle-on-Tyne. Subject: "Two Cases of Intestinal Obstruction."*

## ORIGINAL PAPERS.

### THE ADOPTION OF NOTIFICATION OF PHTHISIS BY LOCAL AUTHORITIES. (a)

By G. CLARK TROTTER, M.D., D.P.H.,

Medical Officer of Health, Paisley.

THE subject which I have the honour of introducing has, during the past year, been under review by many local authorities, and therefore, from point of view of interest alone, should well lend itself for discussion. After briefly referring to the circumstances which have led up to the present advanced view, I propose to give a short account of our experiences so far in Paisley.

Two systems of notification of pulmonary phthisis are commonly in use—(a) voluntary notification, which is optional on the part of the medical attendant; and (b) compulsory notification

under the Infectious Disease (Notification) Act, 1889.

In addition I may add (c) notification of all forms of tuberculosis. This last system is at present being much discussed, and may be the eventual goal, just as we are now progressing from voluntary to compulsory notification of phthisis, so in time we may advance to that of all tubercular affections.

Voluntary notification, although it has many supporters, especially in England, is inadequate. There being an option, the medical man has in most cases to consider the wishes of his patient. This narrows down the notifications to mainly hospital and dispensary patients. Another factor, one which has a considerable influence on the number of voluntary notifications, is the sanatorium or other means of treatment available. If this is freely provided, naturally more notifications are received. Voluntary notification, although of some value—for, after all, the cases so notified are so many possible sources of infection brought to the notice of the Health Department—has been in many towns unsatisfactory. Many cases are notified shortly before death, while the number of phthisis deaths registered very largely exceeds the notifications.

I pass now to compulsory notification. The way for the adoption of phthisis pulmonalis under the Infectious Disease (Notification) Act, 1889, has been opened by the Amendment of the Public Health (Scotland) Act, and by circulars of the Local Government Board. In May, 1905, the Board issued a schedule of inquiry on the "Administrative Control of Pulmonary Phthisis," to ascertain what efforts were being made to check the spread of the disease. In March of the following year (1906) the Board declared pulmonary phthisis an infectious disease within the meaning of the Public Health (Scotland) Act, 1897, and stated that for the effective application of the Act a system of notification was essential, but notification had no administrative value unless followed by curative and preventive measures. On August 28th, 1907, the Public Health (Scotland) Amendment Act came into force.

This modifies sections 57, 58, and 59 (dealing with prevention of infection) of the Public Health (Scotland) Act, 1897. The words "proper precautions against spreading disease or infection," being used instead of "free from disease and infection," and subject to this proviso school attendance, occupations connected with food, and use of public conveyances and ships (with which these sections deal) are made possible.

By these alterations phthisis was brought under the sections of the Act without being harsh to the individual, and the Board, in July, 1908, issued a third circular reiterating its recommendations regarding the administrative control of the disease. This, then, is the brief history of what has led up to the adoption of notification as one of the measures of control.

A considerable number of local authorities have now adopted one or other system of notification; the object of this paper is to invite from the various representatives an account of their experiences in their districts.

As regards the attitude of the public towards notification, the harmonious working of the methods of control depends largely upon the tact of the officials. The information desired may be obtained and the instructions imparted in practically every case without arousing feelings of resentment. Among the poor it is by means of notification that their needs become known, and the visitor is not unwelcome.

(a) Paper opening discussion at the Annual Congress of the Incorporated Sanitary Association of Scotland, at Ayr, September 1st to 4th, 1909.

As regards the profession, in a voluntary system the etiquette of professional secrecy is a real difficulty, and largely limits the notifications to the poorer classes.

Compulsory notification, a statutory obligation, frees, as it were, the medical man.

The medical attendant may, in certain cases, consider visitation at the time not advisable in the interests of the patient. We have had no difficulty in Paisley in obtaining particulars from the medical man himself, and disinfection has been welcomed.

*The System in Paisley.*—Last year, under my predecessor, Dr. Robb, it was agreed by the local authority to add permanently phthisis pulmonalis to the compulsory notifiable diseases under the Notification Act; to appoint a qualified nurse to visit; to provide sputum flasks; to disinfect frequently houses, bedding, etc.

The compulsory notification came into force on March 1st of the present year.

I was able to obtain the services of a phthisis visiting nurse from the Victoria Dispensary, Edinburgh, who commenced her duties on April 5th.

On receipt of the notification she visits the home, not in an officious manner, but, if I may so express it, rather in an "Elberfeld" way, gains the confidence of the patient and relatives, and instructs them as regards ventilation, cleansing of rooms, etc. The information she has gleaned she tabulates on a card. The inquiry does not essentially differ from what is asked in other towns; it has been condensed, as an experienced visitor does not require the prompting headings suited to non-phthisis trained.

The item "Clark Fund" refers to a local charity for consumptives.

#### INQUIRY CARD.

##### FRONT.

Name	Address	Register No.
Visited	M. F.	
Occupation	Sex	Age
	Married	Dr.
Has there been a change of occupation		
Able to work	Full time	Part time
In bed	How long ill	Occupants of same bedroom or bed
relationship, history of cough or consumption among these or visitors	Other inmates of house and	
	Phthisis Pulmonalis.	

##### BACK.

Exmn. of sputum	
Habits as to spitting	General condition, well to do, badly off, food, etc.
" " washing clothes	Been in Sanatorium
" " alcohol	Assisted by societies, Clark Fund, etc.
Sources of infection	
General appearance of house (clean, damp, dirty smelly)	
No. of windows	Can they open
by day	By night
Previous addresses within two years	Are they

The card system I find a decided advantage in many ways. The cards of those on the visiting list can be kept separate. The cases ending fatally can be picked out and form a separate bundle.

When classifying according to location, age, sex, occupation, or any of the items of inquiry, one has but to rearrange the cards. Should a card be mislaid it is of small consequence, as there is an efficient check both by actual notifications received and also by the entries in the register of notifications. The phthisis notifications are entered in a register of compulsory notifications designed by Dr. Robb, the heading of which is equally applicable to phthisis—

#### REGISTER HEADINGS.

No.	Date of Notification.	Name of Patient.
Age.	Residence.	No. of Ward.
Date of Visit.	Date of Onset or Illness.	Occupation.
Phthisis Pulmonalis.	Removed to Hospital.	
	Medical Attendant.	

##### HOUSEHOLDER.

Name.	Occupation.
Inmates.	
Adults.	Children.
Apartment in House.	Clean or Dirty.
Ashpit and Privy.	Water Closet,
etc.	Milk Supply.

##### SCHOOL.

Name.	Class.
Date of Disinfection.	Result.
Recovered.	Died.

##### Remarks.

Multiple notifications are not re-entered, but a note is made under first entry.

Cases abstracted from the registrar's death returns are entered in red ink.

Before passing on to the results noticed so far since the adoption of notification, the following figures, taken from the Registrar-General's report for 1908, giving the death-rates from phthisis in several towns, may be of interest. The rate is expressed as per 100,000 living—Perth, 183; Dundee, 169; Glasgow, 138; Leith, 127; Paisley, 124; Edinburgh, 122; Greenock, 122; Aberdeen, 95. Paisley holds, then, as regards phthisis, a medium position.

The results from visitation of the homes by the nurse have been very good. The houses have improved in cleanliness to a marked extent. A number of cases have removed to better houses. Those found in lodging-houses have moved to institutions or better accommodation. The windows are opened. The sputum flasks lent, and the disinfectants provided, by the department are used.

There were notified for the five months from March to July 103 males and 95 females; total, 198; which, making corrections for non-burghal cases, gives 91 males, 92 females; total, 183.

As regards age, these burghal cases were as follows:—

##### MALES.

-15	15-20	20-25	25-35	35-45	45-55	55-65	65 up
7	9	14	20	22	13	6	—
FEMALES.							
17	11	10	29	15	7	2	1

In England phthisis is more prevalent among adult males, owing to the nature of their work. It



will be noticed that, after adding the 7 male children under fifteen years of age, the women and children make a total of 99. It will be an interesting question when the notification has been in force some little time to estimate how far the flat system of living may be a cause of this. I believe it is a factor as regards rickets.

The percentages as regards house accommodation were found on visitation to be—In lodging-houses, 1.95 per cent.; one-apartment houses, 18.18 per cent.; two-apartment, 62.33 per cent.; three-apartment, 11.68 per cent.; four apartments and upwards, 6.2 per cent. The two-apartment is, of course, the commoner class of house in Paisley. About half the cases visited are in receipt of charities or poor relief.

The trend of present-day hygienic methods is towards home visitation and instruction. The great advances of recent years in sanitary matters have accomplished much, but can the progress due to building construction and outside sanitation keep up the pace?

I have been, as I have said, struck by the results of house visitation both in the department of phthisis control and infant visitation. Sometimes I think it is interesting to look backwards not only as regards progress in preventive measures, but also as regards opinions held years ago. Over forty years ago Lord Derby, speaking at Liverpool, said:—"No sanitary improvement worth the name will be effected, whatever Acts you pass, or whatever powers you confer upon public officers, unless you can create a real and intelligent interest in the matter among the people at large. Whatever administrative measures can do for public health—and they can do a great deal—they can never supersede the necessity for personal and private care. The State may issue directions, municipal authorities may execute them to the best of their power, inspectors may travel about, medical authorities may draw up reports, but you cannot make a population cleanly or healthy against their will, or without their intelligent co-operation. The opportunity may be furnished by others, but the work must be done by themselves. That is why, of the two, sanitary instruction is even more essential than sanitary legislation."

I believe our advances as regards the health of the community beyond the stage at present attained will depend largely upon home visitation, that the opinion of Lord Derby may be taken as a prophecy for to-day. It is by these means, united, of course, with such curative measures as dispensaries, sanatoria and isolation homes, that we may hope in time to reduce the phthisis cases to numbers comparable with other infectious diseases, and the cost of their efficient treatment would then cease to be excessive.

## HOW TO DEAL WITH THE QUACK MEDICINE TRAFFIC. (a)

By J. C. McWALTER, M.A., M.D., D.P.H.,  
F.F.P. & S.G.,  
Barrister-at-Law.

OVER two million pounds—say £2,400,000—have been spent in quack medicines in Great Britain since the last meeting of the British Medical Association, and as toll from this infamous traffic the Government has received £300,000 from the Inland Revenue stamps which cloaked them.

The concurrence of the Government in this traffic has become a national scandal. No other reputable legislature on earth has consented to take from quack medicine vendors what may be described as the "wages of sin." There is, indeed, a small tax in the

United States on proprietary articles, but as their composition must be set forth on the label, the money may be considered as comparatively untainted. The Government of France tolerates no quack remedies—home or foreign; the ingredients must be made known to the police. The German Government have even a stricter rule. Were our flourishing quack medicine makers, who take over £2,000,000 per annum from the sick and ignorant, and pay £300,000 to our Government, to attempt to carry on their calling under like conditions in Italy, or even Russia, the police and the gaol await them.

Grasp the significance of two million pounds! It would provide £100 per annum for every medical practitioner in the British Isles, assuming them to number 20,000. It would be more than amply sufficient to endow such a State Medical Service that everyone who wanted medical help in these countries could obtain it absolutely free of charge.

That two millions of money are wasted on quack medicines each year is, after all, only an economic argument against their encouragement. How many hundreds of thousands die because of their use every year? This is the aspect of the problem which it becomes the British Medical Association to attack. It is not suggested that many thousands die each year actually poisoned by those drugs, but it is certain that an enormous number are brought prematurely to their graves by neglecting to obtain proper treatment for their diseases, through confidence in the promises of quack medicine makers, and by being drained of their resources to purchase these drugs, whereby they become unable to procure either such comfort as they require, or orthodox medical care. It is also certain that an enormous number of young infants are drugged to death by being treated with opiates and narcotics when suffering from bronchitis or the like.

Great Britain now remains the only great Power that tolerates the growth of unchecked quackery of every human disease, and the scandal must be removed. Already certain of the colonies—Australia, the Cape, Canada—are grappling with the evil, and America, where the quack medicine evil had attained greater power than even with ourselves, is vigorously squelching it by the Pure Food and Drug Act of 1902.

If we could induce Parliament to adopt this American Act, with a few modifications, the trouble would be ended. Every medicinal compound exposed for sale would set forth on the label the proportions of alcohol, cocaine, morphine, or other poisonous ingredients which it contained, as well as a statement of its composition. Such a solution of the problem would knock the bottom out of the traffic. Your purple pill person makes his hundreds of thousands by telling the anæmic artisan that his pills owe their virtue to some secret drug, unknown and unprocurable elsewhere. If he is bound to set forth on the label that the ingredients are sulphate of iron and carbonate of potash, the mystery vanishes, and fraud is impossible. If a man does by chance discover an improved formula or a new and useful combination of remedies, he can always be certain of a certain preference. Many of the remedies of our Pharmacopœia—Dover's Powder, James' Powder, Heberden's Ink, Griffith's Mixture, Huxham's Tincture of Bark, Fowler's Solution, and the like—were at one time more or less secret remedies. In time their formulæ became public property, and, instead of being for the benefit of their discoverers only, they are now available for the benefit of mankind. This is the medical as opposed to the commercial spirit, and it is on these lines I propose we should treat all the so-called patent medicines.

The solution, then, of the quack medicine problem is simply this—that makers of the nostrums should be required to set forth the ingredients on the label. This is practically the American remedy; but, after all, the problem in the United States has been very much like the problem with us; the results appear to be satisfactory, and we should not be too proud to follow a good example from a kindred people.

Assuming that the disclosure of the ingredients is the remedy for the quack medicine trouble, how can we insist upon it? An Act of Parliament at once

(a) Paper read at the Belfast meeting of the British Medical Association.

suggests itself, and would be the procedure if you had a Minister of Public Health; but we have no such Minister, and the difficulty of procuring such a Bill might be insuperable. All the power and influence of our Association has not been able to bring the new Medical Act into being, and if we cannot suppress open unqualified practice of medicine by law, we can scarcely hope to interfere with an insidious form of the evil which brings the Treasury in £340,000 a year.

An Act of Parliament is, therefore, probably impracticable, and we must try to deal with the evil within our present powers. What can be done? Already a notable beginning has been made by Dr. Hope, of Liverpool. That capable Medical Officer of Health reflecting that prosecutions were frequently and successfully brought under the Food and Drugs Act for the sale of drugs "not of the nature, substance, and quality demanded," brought a certain quack medicine maker into the police court on the ground that he had sold a medicine as a specific for liver complaints, whereas it was an acidified solution of glycerine, worthless for that purpose, and hence sold to the detriment of the purchaser. The magistrate convicted in this case, and thus a remedy of the quack medicine evil is at once apparent—namely, that the Medical Officer of Health of each district should collect samples of these patent medicines which promise definite cures of definite disease, have an analysis made, and if the composition be shown to be quite incompatible with the claims made for the article, and on the strength of which it was sold, order a prosecution.

The public have often hitherto asked why doctors did not get analyses made of the quack remedies which they denounced, and either expose them or prescribe similar articles. We know that the practical difficulties of competent analysis have been great, and the legal risk of action for misrepresentation even greater, and that our private practitioners dare not tackle the job.

On the other hand, the patent medicine people have traded on our inertia and proclaimed their products as something undiscoverable by analysis and unknown to the faculty. The difficulties about the analysis have now been largely overcome by the action of the British Medical Association in having analyses made, evidently by most skilled and competent hands, of practically all the so-called patent medicines on the market. The results are a revelation. We find that the most largely-lauded remedies, which have made fortunes for their owners, consist of the crudest, commonest, and cheapest drugs, which, if prescribed by the physician, would often be rejected as worthless.

The importance of this work of the Association has not been properly appreciated; it is an undertaking which possibly no other Association could have attempted, and the analyses are such as no other journal would dare to print. The policy of bluff and bounce is much believed in by patent medicine makers, and if any private individual, or any ordinary journal had published the results of the analysis of those patent medicines, they would have united as one man and pooled all their capital to crush the individual or the journal. Knowing the power which lies behind the British Medical Association, the patent medicine proprietors have not dared to attack the journal—in fact, in not a single instance has the correctness of the analysis been questioned. Their policy, however, has been to choke and smother up the results. Thus, although these analyses of patent medicines, of which the names were household words, would be of immense public interest, it does not appear that a single newspaper in the three kingdoms published the results. Even the pharmaceutical papers, although advertizing to the analyses, have been apparently terrorised into largely ignoring them through fear of offending their advertisers. This is not so much to be wondered at, because the modern Mæcenas is the patent medicine man, and, as some £1,500,000 is spent by those people on newspaper advertising every year, they are patrons too good to be irritated.

As there is this difficulty in getting knowledge of the composition of the quack remedies into the hands of the public by the ordinary newspaper channels, the Public Health authorities must take the matter up, and expose them in the police courts. Thanks to

the analysis by the British Medical Association, on the one hand, and to the action of Dr. Hope at Liverpool on the other, the matter is made comparatively simple. It will not be difficult to prove that it is the duty of any Public Health Authority, under the Food and Drugs Act, or otherwise, to prosecute persons selling worthless articles as cures for disease. The local analyst, with the results of the British Medical Association's analyst before his eyes, will have his difficulties greatly lessened and his results corroborated. The Medical Officer of Health can usually testify to the worthlessness of the article for the purpose for which it is sold. Should either of those officials be threatened with prosecution by the patent medicine people, they will be defended from damage out of the public funds. After a few prosecutions have been successfully brought, and the results published in the Public Report of the Sanitary Authorities, other councils will quickly follow suit.

The indications for the treatment of the quack medicine trouble are, then, to get statutory powers to insist that the ingredients be set forth on the label—and pending legislation to that effect to have the various Medical Officers of Health to deal with the makers under the Food and Drugs Act, with the help of the analytical records of the British Medical Association. The Association might well help the campaign by other means—namely, by furnishing chemists with printed results of the analyses of the nostrums on which most of the public money is being spent at the moment. These should be sent out under the authority of the Association, otherwise they would surely be questioned by the quacks. In addition to chemists, this might also be distributed to all doctors in the country, whether members of the Association or not, as well as to Public Analysts and members of the sanitary authorities and the clergy.

Nothing requires to be done but to distribute the reports of analyses which have already appeared in the *British Medical Journal*; these could not be improved upon. Thus in a single issue, at pages 32 and 33 of this year's volume, we find that analyses of at least three patent medicines out of which large fortunes have been made. Of one of these, the sale is claimed to be six million boxes per annum—and the constituents, according to analysis, aloes, ginger, and soap. The cost of the ingredients is said to be an eighth of a penny a box, and the cost to the consumer 13d. for that amount. The full account runs thus:—

#### BEECHAM'S PILLS.

Prepared by Thos. Beecham, St. Helens, Lancs. Price 1s. 1½d. per box, containing 56 pills.

These pills are very widely advertised in a variety of ways. The following is a specimen of the statements made:—

"Ordinary medicines begin at the wrong end, only correct symptoms. People take headache powders for headaches, blood medicines for the blood, and nerve remedies for nervousness, when they only need Beecham's Pills to tone up the digestive organs, the liver and the kidneys, and so keep the whole system in a healthy condition."

In a circular wrapped round the box it is stated that:

"These renowned pills are composed entirely of MEDICINAL HERBS, and are warranted free from mercury or other poisonous substance. . . . Persons of a strong or average constitution, but who may be temporarily suffering from any of the complaints herein mentioned, will usually find the dose to suit them to be three or four pills once a day; sometimes, however, it is necessary to repeat this dose morning and night, according to the condition of the system at the time. No harm can be done by increasing the dose where it is found insufficient, as the Pills can never act injuriously. Others, who may be frequently subject to one or more of the specified ailments, should take smaller doses of the pills occasionally, one, two, or three generally being the ordinary dose, which may be increased at discretion by the patient."

The "complaints herein mentioned" include Constipation, Headache, Dizziness or Swimming in the

Head, Wind, Pain, and Spasms at the Stomach, Pains in the Back, Restlessness, Insomnia, Indigestion, Want of Appetite, Fulness after Meals, Vomitings, Sickness of the Stomach, Bilious or Liver Complaints, Sick Headache, Cold Chills, Flushings of Heat, Lowness of Spirits, and all Nervous Affections, Scurvy and Scorbutic Affections, Pimples and Blotches on the Skin, Bad Legs, Ulcers, Wounds, Maladies of Indigestion, Kidney and Urinary Disorders, and Menstrual Derangements.

The pills had an average weight of  $1\frac{1}{4}$  grains. Analysis showed them to consist of aloes, ginger, and soap; no other medicinal ingredient was found. The quantities were approximately as follows:—

Aloes, 0.5 grain.  
Powdered ginger, 0.5 grain.  
Powdered soap, 0.18 grain.

In one pill.

Estimated cost of ingredients for 56 pills, one-eighth of a penny.

It is to be noted that a certain carefulness of claim as to the definite curing of a definite disease is to be observed in some of the more modern advertisements. Thus, certain nostrums claim that they have cured rather than that they "will cure"—but probably any magistrate would hold that there was a sufficient offer to cure. Another largely advertised pill is thus described by the analyst to the British Medical Association, page 32, 1909:—

#### DR. WILLIAMS' PINK PILLS FOR PALE PEOPLE.

Sold by the Dr. Williams Medicine Company, 46, Holborn Viaduct, London, E.C. Manufactured in the United States of America. Price 2s. 9d. per box, containing 30 pills.

These pills are advertised for a great variety of diseases, prominence being usually given to one disease in each advertisement; thus four long advertisements appearing simultaneously in different papers are respectively headed:—

"Afraid of being touched. So sore with Rheumatism. A once-crippled victim tells how Dr. Williams' Pink Pills cleansed his system of Rheumatism."

"Eczema expelled. Mr. John Chamberlain tells how his sufferings from Skin Disease were cured by Dr. Williams' Pink Pills."

"Sciatica's Swift Pains rendered this Lady helpless. Her case had defied treatment, but Dr. Williams' Pink Pills succeeded by curing the cause of Sciatica."

"The Dark Days of Dyspepsia. . . . Dr. Williams' Pink Pills go to the very cause of the mischief."

Each includes a long description of a "case," usually with a picture. The following is from the concluding paragraph of the first of these advertisements, and the others end in a similar way:—

#### "THE DR. WILLIAMS' WAY.

"When the muscles and nerves are tortured by poisons in the Blood, be the result Rheumatism, Sciatica, or Lumbago, the only way to a cure is to Enrich and Purify the Blood. Dr. Williams' Pink Pills, in this way alone, have cured not only Rheumatism, but Anæmia, Indigestion, Palpitations, Influenza's After-Effects, Eczema, Sciatica, St. Vitus' Dance, Spinal Weakness, and many forms of Nervous Disorders dreaded by men; also the special ailments of women."

In a circular enclosed in the package it is stated that

"The success of this remedy lies in the recognition of the controlling influence of the blood over the health of the body. It is the root of disease that must be attacked, and the most important development of modern medical science has been in discovering that, in most diseases, this lies in the condition of the blood. If the blood is thin and poor, the nerves cannot receive their proper nourishment, the system becomes run-down, and in a condition to invite disease. Build up the blood, restore the worn-out nerves and you remove the cause. Dr. Williams' Pink Pills for Pale

People contain elements necessary to give new life and richness to the blood.

"GENERAL DIRECTIONS:—Before beginning to take these Pills, cause the bowels to be freely opened by laxative or purgative medicines. . . . It is best to begin with one of Dr. Williams' Pink Pills after each meal, commencing the use of the medicine after a mid-day meal. Being stimulating, it is best not to take them on an empty stomach.

After taking for a few days, the number may be increased to two Pills at a dose, while in severe cases three may be taken at a time."

The pills were ovoid in shape and coated with sugar, coloured pink; after removal of the coating they had an average weight of 3 grains. Analysis showed them to contain ferrous sulphate, potassium carbonate (these two having reacted more or less completely, and about one-third of the iron having become oxidised to the ferric state), magnesia, powdered liquorice, and sugar. Since it has been stated that these pills contain arsenic, careful search was made for it, but it was not found. The pill is thus merely one of the many variations of Bland's pill. The quantities of the different ingredients found indicated the following formula:—

Exsiccated sulphate of iron, 0.75 grain.  
Potassium carbonate, anhydrous, 0.66 grain.  
Magnesia, 0.09 grain.  
Powdered liquorice, 1.4 grain.  
Sugar, 0.2 grain.

In one pill.

Estimated cost of ingredients for 30 pills, one-tenth of a penny.

Every practitioner finds that almost every patient who goes to him with gastric ulcer, or even cancer of the stomach, has been persuaded by quack advertisements that she is only suffering from indigestion, and, in fact, the patient has almost invariably spent a considerable sum of money on such remedies for the supposed ailment. One of the nostrums responsible for spreading the belief that almost all ailments are due to indigestion is thus described in the same number of the *British Medical Journal*:—

#### MOTHER SEIGEL'S CURATIVE SYRUP.

Proprietors, A. J. White, Limited, New York and London. Price 2s. 6d. per bottle, containing 3 fluid ounces.

Although this is described on the wrapper as "for dyspepsia," so many disorders are stated to be due to this cause, and amenable to treatment with this preparation, that it may fairly be included here. On the other side of the wrapper it is called "A cure for impurities of the blood" and "A cure for dyspepsia and liver complaints." In a circular enclosed with the bottle it is stated:—

"The symptoms mentioned above are the smoke of the fire of indigestion—a fire that will eat out your very vitals and sap your strength and vitality. For it can't be too often repeated that indigestion is the root of a great deal of evil, the origin of a great many disorders which no man quite understands how he came by. And why this is can easily be explained. Disease is poison; its symptoms are the manifestation of the poison. Indigestion creates many dangerous poisons, and is therefore the cause of many diseases.

"So let us get rid of the smoke by putting out the fire, and purify our blood and system with Mother Seigel's Syrup, which will sweep away the poisons and make us healthy and strong.

"Mother Seigel's Syrup is a highly concentrated, purely vegetable compound, having a specific action on the stomach, liver, and kidneys."

The directions on the label are:—

"Shake the bottle so as to mix the sediment. Commence by taking 10 or 15 drops three times a day in a little water. If this does not give relief, the dose may be increased to 30 drops."

Analysis showed the presence of free hydrochloric acid, tincture of capsicum, a bitter substance agreeing in its properties with aloes, and sugar (partly as invert sugar); the colouring and flavouring substances also present indicated that the sugar had been added

in the form of treacle. Quantitative determination of those ingredients capable of it, and estimation of the others by comparison with known mixtures, indicated the following formula:—

Dilute hydrochloric acid B.P., 10 parts by measure.

Tincture of capsicum, 1.7 parts by measure.

Aloes, 2 parts.

Treacle, 60 parts.

Water to 100 parts by measure.

Estimated cost of ingredients for 3 fluid ounces, one-third of a penny.

## THE RELATION OF HEALTH TO INDUSTRY. (a)

By B. A. WHITELEGGE, C.B., M.D., B.Sc.,  
F.R.C.P.,

H.M. Chief Inspector of Factories.

THE first portion of the address dealt with the pioneer work of Mr. Turner Thackrah, a Leeds surgeon, who, in 1831, wrote a monograph on the effects of various trades and occupations upon health. After describing many of the reforms and discoveries that had been made since that time, Dr. Whitelegge proceeded:—

Formal inquiries by committees have rendered signal service in the same direction. There have been many such, and one recent example will suffice. In certain branches of the great textile trade of Lancashire, cotton, the question of humidity had long been in serious dispute between employers and employed, and after endless unsuccessful attempts to arrive at a solution in other ways, a committee was appointed. It comprised chosen representatives of both parties concerned, and also scientific experts, with Sir Hamilton Freer Smith as chairman. The outcome of exhaustive inquiry and discussion was a unanimous report, which promises to solve the question, although certain details are reserved for further experimental research. In bygone years humidification had been carried to excess, and special legislation became necessary, the effect of which had been to secure not only limitation of humidity, but also a high standard of ventilation where humidification is practised. Nevertheless, the operatives continued to protest against humidity, and although statistics failed to show any evil effects in the way of disease or death, it was felt that something was wrong. That something proves to be the wet-bulb temperature, which the present law allows to reach a point at which the body temperature rises, so that health suffers, though without necessarily giving rise to any named disease.

Upon municipalities and other local authorities, and Medical Officers of Health, rests the primary responsibility for sanitation in home work, in workshops, and in some respects in factories also, and as an old Medical Officer of Health, I am gratified to realise how much is being done in that vast field. Recently the Home Secretary had occasion to appeal for assistance in the investigation of a question of national importance, the effect of the employment of married women upon their health, and that of their children, and the response from Leeds and many other of the great industrial centres was prompt and effective.

Another important responsibility which local authorities share with architects, builders, and, of course, owners, is that of seeing to the initial fitness of buildings for the purpose for which they are intended, and as regards factories many questions arise which can be settled with least trouble and expense at that stage; not only soundness of construction (especially where heavy machinery is to be fixed), means of escape from fire, lighting, drainage (not forgetting trade effluents), sanitary accommodation, lavatories, cloak-rooms and mess-rooms where the Act requires them, but also such details as the choice among materials and coverings of floors and walls (having regard to the requirements of the Factory Act as to cleansing), the slope and drainage of floors where wet processes are to be carried on, warming, ventilation, and exhaust where dangerous dust and fumes will have to be dealt with. The Arsenic Commission a few years ago found that

arsenic in the fumes of certain kinds of fuel used in the curing of malt condensed upon beams and rafters of malt-kilns, and at intervals fell back into the malt. It was in no way necessary to have these lodging-places, but no care had been taken to avoid them, and they had been provided even in kilns of recent construction. Similarly in new factories costly alterations have sometimes had to be made because statutory requirements as to means of escape or sanitary accommodation had been overlooked when the plans were settled. It is a matter for regret that few towns have formulated their requirements as to means of escape, in small factories, in the shape of bye-laws which they have power to make.

The State is indebted to many Medical Officers of Health for important investigation into the effect of local industries upon health. They supplement the broad statistics of the Registrar-General with the advantage of intimate local knowledge of the industries in question, and of the conditions under which each process is carried on.

There is one pitfall in connection with industrial statistics of accident and disease which may easily lead to error—namely, the widely different conditions in occupations that pass under a common name. Nearly every named trade is in reality a complex of different processes, the dangers of which are not necessarily equal or even of the same kind. Pottery, for example, includes many different kinds of manufacture, and of processes in each. Some of the latter are dusty, some are poisonous, and in varying degree; some are intermittent, others continuous, and some entail exposure to high temperatures. Some of the dangerous sort are carried on with all reasonable precautions, which may be neglected in others. Perhaps I may put my point most simply in the language of low mathematics, vulgar fractions. Given a true numerator, in the shape of a complete record of cases of illness or death attributable to the occupation, with any necessary qualification as to extraneous causes outside the factory, we still need a true denominator in order to arrive at any sound statistical conclusion as to the rate of incidence. That denominator cannot be the total number of potteries, for they vary in size and in the risks incurred. Nor can it be the total number of persons employed therein, for not all are exposed to danger. We come nearer to the true denominator when we take the numbers employed in a given process, or exposed to the danger in question, but even this is not altogether precise or conclusive by reason of other factors I have mentioned. As a rule the most trustworthy rate is that calculated for a unit process or kind of employment, with corresponding limitation of both numerator and denominator, and even then varying degree and duration of exposure to risk may affect the result, not to mention varying degrees of susceptibility according to age and sex.

If phosphorus poisoning in the match industry had been so common as to warrant statements in the form of incidence rates, the calculations would be further complicated by the consideration that necrosis is practically unknown in the first few years of employment in phosphorus processes.

When all necessary structural provision has been made, it rests with the occupier to see to the administrative maintenance of efficiency, by watchfulness, and where necessary by occasional rehearsal. We have records of elaborate outside staircases for escape in case of fire, ending outside a window which would not open, or was not distinguishable inside from other windows; and of emergency exits which were blocked and rendered useless by storage of goods. An occasional rehearsal, such as is arranged in many works, would at once reveal defects of this kind. Appliances for first aid, for instance in gassing, are of little avail unless there are men at hand who know how to use them. Exhaust ventilation is dependent upon the ducts being kept clean, and that can only be secured by systematic inspection.

In recent years we have tried to get into closer relation with the industries and administration abroad; we have already learned some useful lessons from them in the way of safeguarding employment, and I hope we have given something in return. In one respect in

(a) Abstract of the Presidential Address in Section of Industrial Hygiene, Leeds Health Congress, July 22nd, 1909.

particular they are ahead of us. In several industrial centres—Berlin, Milan, Amsterdam—I have seen well-organised permanent local exhibitions of safety appliances, where an employer wishing to examine the latest improvements in detail of that kind can find them and study them. There are attendants ready to explain anything that needs explanation, and to give practical demonstration if need be. Similar arrangements have been made at Paris, Vienna, Munich, and elsewhere. In this country it is true that we have exhibitions of machinery and appliances, on a permanent footing, or simply as part of a temporary trade exhibition; but in these, important and useful as they are, fencing finds little recognition, and many of the exhibits, admirable in other respects, present quite unnecessary points of danger, defects which are obvious and will have to be remedied at increased cost and less conveniently, as soon as the Factory Inspector sees them in a factory. Indeed, the purchaser will be breaking the law if he takes them into use as they stand. Nor does the omission become any more reasonable when it is remembered that the same makers often make the same machinery for export to foreign countries or to India without forgetting the fencing. In such cases, however, the contract requires it, and home contracts need not be less explicit.

Where an important industry, entailing risk of accident or injury to health, is localised, such an exhibition would be of permanent interest and service, and I am optimistic enough to hope that something of the kind will be instituted, for instance, in the great textile centres and in those of the metal and mining industries, and in the Potteries. Meanwhile, it is not easy to find any satisfactory answer to the question which was put to me at each of the foreign cities I have named: Why is it that the United Kingdom, with its enormous industrial population and vast yearly records of industrial accidents and disease, has nothing to show in the direction of practical demonstration of means of safety, other than the actual installations on individual private premises? As matters stand, employers who desire to adopt the best precautions often go to unnecessary cost in ineffective installations, and no one realises more fully than I do the unwieldiness of blue books as a source of information, in comparison with a definite working visible example of things as they should be.

Take the case of a new factory in which a dangerous dusty process is to be carried on, and exhaust ventilation is required, and it is proposed to effect it by means of fans. Somebody has to decide upon the kind of fan, its size and speed, its position, the calibre, direction and arrangements of main and branch ducts, the position, construction and hooding of the exhaust opening so that it may carry away the dust most effectively with least interference with work, and as near as may be to the point of origin. Counter openings, to admit air into the room, are necessary, and in some cases where hoods are inconvenient, the removal of dust can only be made complete by providing also a slight plenum draught blowing past the source of dust into the exhaust opening and thus confining its supply to the dust-laden air. Then the disposal of the dust has to be considered; whether it shall be allowed to settle in a dust chamber, or arrested by filtering the air through canvas screens or bags, or by a water surface or spray, or whether, on the other hand, it shall be simply discharged into the open air for the public benefit, possibly to be blown in again at the windows. If the employer is wise, he takes expert advice in such matters and follows it; but too often it is assumed that the question is simply one of fan or no fan, and costly mistakes result. If the dust is heavy and discharged with force, as in grinding, it is not easily deflected from its initial course by air currents, and it has to be intercepted before it can be carried off, but so far not much advance has been made on the lines indicated long ago by Overend, that is in the way of harnessing the tangential discharge of dust and the wind of the grindstone, and turning them to account in the removal of the dust.

Metal grinding is only one of the great industries of the country in which dust is a grave danger to the health and life of the operatives. And yet we may look in vain even in the centres in which those indus-

tries are carried on, for any working model accessible to the public by way of demonstration of what can be done. In these matters we move slowly, and the practical application of the great advances made in recent years as to removal of dust and fumes is delayed accordingly.

Safety appliances of all kinds, safe modes of construction, and means of ventilation, could be illustrated more convincingly by practical visible example of the kind than by precept. We have now several standards of ventilation, in terms of carbonic acid or delivery of air or velocity of draught, standards of humidity, and of soluble lead. It is surely desirable that employers and workmen should have the opportunity of learning how these are applied, by what methods and appliances the determinations are made, and what simple tests can be carried out without costly appliances or expert knowledge. We all know when a chimney smokes, and need no chemical or anemometric tests to assure us that it is really smoking, but it does not seem to occur to anyone that an exhaust intended to carry away fumes or light dust can readily be tested in the same simple way; if smoke is applied and eddies about in the hood and escapes from the edge, the draught is not efficient, whatever the anemometer may say.

I have intentionally laid stress upon dust and dust prevention for the reason that their importance has until recently hardly received sufficient recognition. Take for example the pottery industry, which has long been regarded as a dangerous one, and is now being thoroughly studied afresh by the Departmental Committee, over which Sir Ernest Hatch is presiding, with the assistance of representatives of the employers and employed, and other experts. Lead poisoning is a terrible evil, in great measure preventable; something like three-quarters of that which prevailed twelve years ago has in fact been prevented, and the reduction will go further. But there is a still greater evil, equally preventable, against which we have for years been contending with some success, namely, the phthisis or "potters' rot," due to inhalation of dust. Of this the public hear comparatively little. Though more serious it is perhaps less dramatic than lead poisoning; there are no quotable figures of disease, and those of death only after the lapse of years in the invaluable decennial records of the Registrar-General. The same mischief arises in many other industries, and hence our campaign of recent years for the suppression of dangerous dust, by means of exhaust ventilation, enclosed apparatus, substitution of wet processes for dry. It has to be remembered too that much of the lead poisoning arises from inhalation or swallowing of dust containing lead.

Adequate lighting is one of the important factors in industrial efficiency, although the Factory Acts have little to say about it. Even as regards daylight there is something to be learned from the experience of schools, and the use of artificial light raises further questions as to its quality as well as its intensity, its actinic value and the part of the spectrum to which it belongs. Something more definite than the vague terms good and bad lighting is wanted for practical purposes, and it should not be impossible to arrive at data fixed by actual measurement of a precise kind, whether by photometer, spectroscope or otherwise.

As to temperature, measurement is familiar and simple, or at all events it is thought to be so, but there is much to be taken into account beyond the reading of the thermometer. The reading varies with position in the room, with degree of exposure to radiant heat, as well as temperature of the air in general and currents of air in particular. For sedentary employment, not requiring much exertion, it is held that the temperature should not be below 55° F. With regard to the upper limit, it has long been known that work can be carried on at extraordinarily high temperatures without apparent ill-effect, but the recent report of the Humidity Committee brings out the important qualification that all this is contingent upon dryness of the air, and that the wet-bulb temperature is the true danger signal.

There is a wide and important field for physiological and anthropological measurements of the kind

now being adopted in schools, and examples more closely connected with industrial conditions are to be found in the investigations made by Dr. Legge and Dr. Collis in the course of inquiries into certain of the dangerous trades. Research of a similar kind might usefully be directed to the question of fatigue, as determining the optimum duration of continuous spell and daily and weekly hours of work in the more arduous kinds of employment—those requiring alertness, concentration of attention, as well as sustained physical effort. For some determinations of the kind little beyond mere counting would be required. The Factory Acts allow for women a continuous spell not exceeding  $4\frac{1}{2}$  or 5 hours, and 10 or  $10\frac{1}{2}$  hours a day. Is it, or is it not, the fact that beyond a certain point within those limits attention slackens, threads are dropped more frequently, and the effective output per hour is lessened? One would anticipate that in some kinds of occupation the answer would be affirmative, and no doubt there has been in practice rough adjustment of hours accordingly. Even as regards men, whose hours are not limited by statute, the point is sometimes of grave importance, as witness the records of signal-men employed for excessive hours on emergency, and in places under the Factory Acts the same question occasionally arises, notably in connection with men in charge of cranes and other lifting appliances, upon whose watchfulness the safety and life of others may depend.

The welfare of the operatives in certain industries is affected by demands on the part of consumers, and in saying this I do not refer so much to allowance of reasonable time even in such high things as dress-making and millinery, as to the choice among articles equally suitable for the intended purpose. Reverting once more to pottery for an example, some kinds of ware can be made without lead, and others with limited use of lead, but this is further dependent upon the tint and decoration required, some of which entail increased use of lead for that purpose alone. As another example a large section of the public grew accustomed to phosphorus matches, with their familiar smell and manner of striking, and entertained doubts whether others were so good, or would keep, or resist damp. Experiment on these points were reassuring, but the demand for the old kind of matches continued, and it was not until the match manufacturers agreed unanimously to the prohibition of phosphorus, coupled with prohibition of import, that the Government were able to put an end to this needlessly dangerous branch of industry. In other countries the task was easier; in some the manufacture of matches was a Government monopoly, and in others the use of safety matches which entail no risk of the kind, was general.

Here I must stop, leaving untouched many branches of our subject upon which I should have wished to dwell had time permitted.

## OPERATING THEATRES.

### ST. THOMAS'S HOSPITAL.

**OPERATIONS FOR RECURRENCE OF CARCINOMA OF THE BREAST.**—MR. EDRED CORNER operated on a woman, æt. 55, for recurrence after operation for carcinoma of the breast. The original operation had been done about a year before. At it the breast, the sternal part of the pectoralis major muscle, and the whole of the contents of the axilla had been removed. In order to do this last step thoroughly, the skin of the axilla had been turned down as a flap by means of an incision backwards from the original wound; the result of this was that a more or less tri-radiate scar had resulted. If this scar is examined, Mr. Corner said, it will be seen that all three limbs show the thin, clear scar resulting from union by first intention. Where the three straight scars unite it is seen that union has not been by first intention. After the original operation the tips of the triangular skin flaps necrosed and separated, leaving a small place, perhaps an inch in diameter, to granulate; so that in this case there is

the scar of an operation done for malignant disease, nineteen-twentieths of which healed by first intention, and one-twentieth did not. It is remarkable in these circumstances that the recurrence which appeared a year later showed itself in the one-twentieth, which healed by second intention, there not being a trace of any recurrence in the nineteen-twentieths which healed by first intention. Of course, it may be that a fragment of the original tumour was left behind at the very spot where the three straight scars joined, where healing was by second intention. The recurrence itself consists of three small nodules. From the character of this recurrence and of the original operation it is very improbable that fragments of the growth were sown only in this part of the wound and not in any other. Rather it is more probable that fragments of the growth were left or sown in other parts of the wound. But where the healing was by first intention, the fragments have grown slowly, never being apparent or even having disappeared, so that recurrence is either not apparent or has not occurred. In the region of the wound, where healing was other than by first intention, the fragments of the growth which were implanted there have grown and become apparent. This case, he thought, shows most clearly the great influence which primary union or suppuration has on the success or failure of surgery in operations for the removal of malignant disease. Mr. Corner then dissected away the recurrent nodules and sewed up the wound.

Another patient was operated on by Mr. Corner for recurrence of the growth after removal of carcinoma of the breast, the recurrence in this patient being behind the clavicle. It is important, Mr. Corner said, to avoid recurrence in this situation, as it occurs beyond the field of the original operation, hence it is not a recurrence in the true sense of the word, the growth being there at the time when the original operation is done. The clinical interest of this case, he remarked, lies in the fact that recurrences in this situation are often said to be inoperable, and by the time that the glands above the clavicle have become sufficiently enlarged by the growth to be recognisable, infection of the mediastinal glands must also have occurred; nevertheless, he has often removed malignant glands above the clavicle with benefit to the patient, the patient living some years more. Moreover, it is much better for the patient to die, if she is going to die, than to live the remainder of her days with the presence of an obvious and increasing tumour to distress her, hence it is advisable to remove these recurrences wherever it is possible.

The space above the clavicle is a difficult and dangerous situation in which to operate, because of the presence of many large vessels, nerves, and lymphatics, and because the operation has to be conducted in a deep chasm behind the clavicle. But these cases are desperate ones, and necessitate that an extensive and thorough operation should be done amongst dangerous surroundings, hence he would advise that the middle half of the clavicle be removed and not replaced: this allows of the operation being done easily and successfully without injury to the vessels, nerves, and lymphatics or pleura.

Mr. Corner then turned down a flap of skin from over the clavicle and the lower part of the neck; the attachments of the muscles to the clavicle were then divided, defining the bone. Mr. Corner then explained that it was advised in order to remove the clavicle to begin by disarticulating its internal end from the sternum, but he had found this troublesome, and he preferred to saw partially through the clavicle at its inner and outer part, completing the division of the bone with bone forceps. This procedure he had found quicker and accompanied by less hæmorrhage than the complete removal of the clavicle by disarticulation. The detached part of the clavicle was then removed, and the subclavian vessels, pleura, and brachial plexus exposed. Two enlarged glands were seen and easily dissected away. All bleeding vessels were then tied and the skin wound closed in the usual manner.

Healing took place by first intention, and it was extraordinary how little the movements of the shoulder were affected by the loss of the middle half of the clavicle.



## CORRESPONDENCE.

### FROM OUR SPECIAL CORRESPONDENTS ABROAD.

#### FRANCE.

Paris, Sept. 19th, 1909.

##### BANTI'S DISEASE.

THE disease or syndrome of Banti presents special characters which distinguishes it from other cases of splenomegalia. It is particularly chronic in its manifestations, and recognises three periods. The first period is characterised by two symptoms, enlargement of the spleen and anæmia. The spleen may attain very large proportions, invading the iliac fossa but preserving its form. The surface is hard and smooth, while the tumour is absolutely indolent. It is thus that the nature of the disease is frequently discovered by chance, in the course of examination.

The second great symptom is anæmia: the patient is pale, out of breath, presents cardiac souffles, and the number of red corpuscles as well as the amount of hæmoglobin is diminished. At this period the liver is of normal size and works well.

This condition is generally very long, running through two, three, or even five years. At the end, abundant hæmatemesis may set in, compromising the life of the patient. The second period is shorter and presents as principal symptoms a decrease in the diuresis and an increase in the volume of the liver, provoking gastric disturbance, dyspepsia, and hæmorrhoids.

The third period is marked by the presence of ascites due to atrophic cirrhosis of the liver. After one or two evacuations of the liquid by tapping, the general health is affected; gastro-intestinal hæmorrhage appears, as well as epistaxis and purpura, and death comes on from hepatic insufficiency. The duration of this period does not exceed eight months.

As to the mode of development of this malady opinions are divided. MM. Gilbert and Lereboullet consider the malady of Banti as belonging to the class of hypersplenomegalic cirrhosis. From the beginning the liver is at fault, while the enlargement of the spleen is consecutive to the alteration of the liver. M. Chauffard, on the contrary, sustains the existence of Banti's disease: for him the lesion of the spleen is primary, secreting noxious products which reach the liver through the splenic and portal veins provoking consecutive cirrhosis. This idea has the advantage of being verified by experimental research.

As to the treatment, it may be said at once that Banti's disease can get well even when abandoned to itself. In such cases the treatment might be limited to the secondary symptoms: the hæmorrhage and ascites when necessary, while cod-liver oil and arsenic may be given for the general health. Injections of atoxyl up to two grains every second day, have been tried with success. Mery recommends injections of cacodylate of soda. Surgical treatment has been recommended, the spleen has been removed at an early date and before hepatic cirrhosis set in. Banti furnishes 16 cases thus treated and which recovered, while Harris and Herzog give statistics of 19 operations, of which 14 were successful.

##### PYURIA.

The presence of pus in the urine is revealed by different characters: purulent streaks or filaments, coming generally from the urethra and composed of an agglomeration of leucocytes in a magma of epithelial cells; a cloud of flakes which deposits on standing, or a general cloudy aspect with an increase in the quantity of urine indicating a renal origin.

Divers causes, however, may lead to believe in the presence of pus, when in reality it does not exist. Such, for instance, is spermatorrhœa, which may possibly pollute the last drops of urine or filaments due simply to epithelial cells or spontaneous fermentation of the urine. To avoid these errors, the practitioner should have the patient urinate in his presence. Another great cause of error is the presence of urinary sediments. The patient should be asked to state if the urine was clear on emission, and only gave a deposit on cooling (urates), or if the emission was cloudy at

the outset (phosphates). By heating, the urates are immediately dissolved, and a drop of acid dissolves the phosphates. These experiments should never be neglected, as phosphaturia has a strong resemblance to purulent urine.

Where the presence of pus is correctly diagnosed, its origin becomes a matter of importance. Filaments indicate in general an urethral or prostatic origin. To distinguish between the anterior and posterior portions of the urethra, the patient is asked to urinate in three glasses; if the filaments come from the anterior portion the first glass alone will contain them; if from the posterior portion they will be found in the last glass.

In case of general suppuration, the quantity and its intermittence are of primary importance. If the deposit is abundant, the kidney is at fault, proving the existence of pyo-nephrosis, which may drag on for years. Intermittence is also a character of renal disease, as the bladder suppurates continuously.

Renal pyuria is frequently accompanied by vesical symptoms (frequency of emission and pain), but sometimes it is necessary to examine whether the bladder or the kidney is at fault.

In the case of the bladder the deposit is less consistent and more constant, while the organ is sensitive to the touch, to the passage of a catheter, or to distension; where the kidney is diseased the bladder is not sensitive, the corresponding ureter is increased in volume, swollen at its vesical orifice and painful, while the cystoscope shows inequality between the two vesical orifices. Catheterisation of the ureter confirms the diagnosis. Where the two kidneys are diseased, polyuria is abundant, the general condition of the patient is bad, and fever persists in spite of a catheter à demeure.

The causes of the affection may throw some light on the subject. Suppuration can be provoked by ascending gonorrhœa or by the use of a septic catheter; in such cases the idea of tuberculosis should be eliminated. On the other hand, where the patient affirms that neither of these causes were possible, presumption of tuberculosis is warranted. Bacteriological examination will clear up any doubt.

The treatment is that of the cause. First of all an exclusive milk regimen should be proscribed; it does no good and tends to weaken the patient, who requires all his strength to struggle against this depressing affection. Santal is of use, and certain antiseptics, as benzoate of soda, urotropin or helmitol, while waters as Contrexéville, Evian or Vittel are to be recommended. Where medical treatment fails, recourse should be had to the usual surgical operations.

#### GERMANY.

Berlin, Sept. 19th, 1909.

##### VERONAL AND VERONAL-SODIUM.

In the *Deutsche Med. Zeitung*, No. 68/09, Dr. Alfred Katzenstein contributes a note on the above-named preparations. The latter has been more recently introduced by the original producers of veronal, as in some respects a more perfect preparation. It is distinguished from the older drug by greater solubility, and perhaps a more disagreeable taste. Veronal requires 150 parts of cold water, whilst veronal-sodium is ten times as soluble requiring only 15 parts of water for its ready solution. Its solubility renders it much more prompt in action, and from its being more readily parted with the feeling of heaviness on the morning after taking it is said to be less marked. The writer gave the two preparations alternately to the same patient, and had also varied the two in other cases. His conclusions were that the disagreeable taste of the veronal-sodium was complained of, and that it was not disguised by covering tablets with chocolate. In general, however, the sodium compound was more prompt in its action owing to its greater solubility. On this ground he made some distinction in regard to the administration of the two preparations. There are as is known two forms of sleeplessness: one in which the patient cannot get off, but who sleeps soundly when once he has fallen asleep; and the other in which the patient falls asleep readily, but

awakes in the early hours to toss restlessly about the bed until the morning. In the first form he considers veronal to have the preference, whilst in the latter he considers the sodium combination to be preferable on account of its more prompt action. Here in the night the veronal difficulty—solution of the veronal—is dispensed with, whilst the sodium tablets are readily dissolved in the glass of water at the bedside. People who are nervous and bad sleepers will find the sodium combination useful on journeys, in hotels, and for the sleepers in trains, but the medicine must, of course, be taken some little time before going to bed. In general he recommends that veronal should be taken in hot tea, but he also finds that it is well taken in an effervescing drink, and aerated waters. In the case of veronal he puts the powder on the tongue and washes it down with the liquid, but with sodium-veronal it is best to dissolve it in the liquid before giving it.

#### THE DEMONSTRATION OF BACTERIUM COLI IN WATER.

The Institute for Hygiene, Berlin, gives a report on this matter (*Arch. f. Hygiene*, 70/4). By means of precipitation and inoculation of the precipitate on a nutrient medium colon bacilli may be shown to be present in water when there are no more than 7 colonies to the litre. On Drigalski's medium the colonies, 2 to 6 mm. in diameter, are a bright red and not transparent; dark red colonies are also met with. On the nutrient medium of Endo the colonies are intensely red, sometimes with a green shimmer on the surface like fuchsine crystals. The process of precipitation and inoculation does not require any elaborate laboratory arrangements, and gives a positive result within 20 hours. When one is thinking only of the colon bacillus the typhoid bacillus may sometimes be stumbled on.

#### THE FOUNDING OF HOMES FOR MOTHERS A SOCIAL DUTY.

In the *Vierteljahrsschr. f. öffentl. Gesundheitspflege*, 3/09, Dr. Gradenwitz of Breslau pleads for the foundation of mothers' homes, especially for those unfortunate females of the middle classes who are about to become the mothers of illegitimate offspring, as it is this class especially who both morally and psychically are in the greatest need of protection. He claims that it is a national duty to take care that all the children in such cases should come into the world in a condition of good bodily health, and that they, along with the mothers, should enjoy a long period of protection, lasting for months, if necessary, or during the period of lactation, so that a rational increase of the population may take place, and the great waste of infant life during the early months of life be prevented. The mortality amongst children during the first year of life is notorious and appalling, and the utmost should be done to prevent it. It is undoubtedly of the first importance to the State that children (young soldiers and their wives) should come into the world, that they should grow up strong and capable of military service, and nothing would be more likely to prevent the awful waste of infant life that is continually going on than the foundations the writer pleads for. As regards Germany alone, he observes the social necessity for the founding of such homes will become apparent to everyone when he becomes aware of the pitiful fact that 150,000 illegitimate children are born yearly in private houses in Germany. The writer, in conclusion, points to the good results that have been obtained in the mothers' homes that are already in existence.

#### AUSTRIA.

Vienna, Sept. 18th, 1909.

##### WASSERMANN'S SERUM REACTION.

THIS is a test for syphilis, recently introduced, that is still challenged for its reliability. It is performed with the serum and blood in a menstruum of glycocholate of soda, and is intended to supplant the complementary method which requires expensive apparatus and a considerable amount of labour to perform. Schwarzwald, in Prof. Sternberg's Klinik, comes forward with 302 cases which he has examined in different institutions, such as lunatic asylums and imbecile institutions, beside the hospital over which he presides. According

to Porges the reaction is "good, but not absolute, nor can it be accepted as a substitute for the complementary method." Bauer records 60 cases examined by the complementary method, 19 of which were positive, but the coagulation method gave only eight positive, two doubtful, and all the others negative. Fritz and Kren used lecithin instead of the glycocholate of sodium, but they consider the results more reliable with the latter. Of the 302 cases in question we may group them into different classes for the sake of convenience in defining the stages of the disease, such as tabo-paralysis, congenital syphilis, and Chiari's aortitis or meso-aortitis proliferans. All these had to be differentiated from tuberculosis, diabetes, scarlet fever, etc., etc. The positive reaction was observed within twelve or twenty hours, sometimes in large flakes, other times fine powder, either sinking to the bottom or forming a layer on the surface. The experiments were conducted with controls with sterilised physiological salts solution which remained perfectly clear. After the diagnosis had been completed and the history satisfactory, 65 were then found to have a real or suspicious character of syphilis, of which 41, or 63 per cent., gave a decided positive reaction, and 24 negative.

With these results Schwarz adds phenomenal changes which he cannot explain, and leaves it to the reader for the time being. In three cases the reaction was negative on the first trial, but after three applications of mercurial unctions and one month elapsing before the next test, gave a positive reaction. Another case, without unction, in the course of a month gave a positive reaction, which had been negative before.

#### TRANSPLANTATION OF ORGANS AND ARTERIES.

Garre has excited a good deal of criticism by the paper read at the International Congress on his experimental operations in transplanting blood vessels and attaching them by invagination. Payr had previously endeavoured to accomplish this by an aluminium prosthesis, but Karl, in 1905, introduced his so-called vascular circle loop, which was more secure and was readily adopted by clinical surgeons, while Karl has done it in animals. The transplanting of other organs, like the spleen, liver and bowel, has not yet been so successful, although he is hopeful and sanguine enough to believe in the transplanting of limbs. By this means the transplanting of an artery from one animal to another, or from an animal to a man were easily accomplished, and after 52 days the circulation was quite restored. Another experiment that proved successful in his hands was the transplanting of a part of a vein into an artery. It had always been feared that a vein would be too feeble or elastic to take the place of an artery, as it would probably distend and form a sac, but these experiments have disproved the fallacy, as the new vein inserted into the artery with high pressure, soon accommodates itself to the artery and performs the physiological function of the arterial vessels. This is a useful part of knowledge to the surgeon who may soon repair a torn artery from a suitable vein. On the transplanting of organs he had twice obtained two good results in dogs, where he transplanted the thyroid glands. Stich and Makks have also transplanted the kidneys with good results.

#### HUNGARY.

Budapest, Sept. 18th, 1909.

##### THE PRESENT STATE OF OPHTHALMOLOGY IN HUNGARY.

I AM privileged to send you the address delivered by Prof. Emil de Grósz, Secretary of the Sixteenth International Congress, President of the Ophthalmological Section.

"It is a great honour," he remarked, "for me to be allowed to preside, as chairman, over the meetings of the Ophthalmological Section of the Sixteenth International Congress. I experience strong emotions as I stand before you, gentlemen, the representatives of ophthalmological science all over the world, and feel that I must offer some explanation for the presumption of so small a nation as we Hungarians are in having invited the leading medical authorities of the greatest nations to make our modest home the scene of their

united efforts in the cause of medical science. On the occasion of one Congress the delegate of Sweden said that the tree of science grows in every soil if properly taken care of. I may with pride assert that the tree of ophthalmological science in Hungary is no weak sapling, but a strong, time-worn trunk, whose roots are deeply engrafted in our public institutions, and which has already produced blossoms, and even fruit. For this fact, too, we have you to thank; the Hungarian scholars practising in our science have endeavoured to ennoble the Hungarian tree of ophthalmology by grafting on it all that they have been able to learn from those nations who are the leaders in the work of civilisation. Every nation will recognise the traces of its influence on the development of our institutions, and if Boerhaave was called *Communis Europæ præceptor*, may we be allowed to aspire to the title of *Communis Europæ discipulus*?

"To-day the pupil bids hearty welcome to his masters in his unpretentious home. As I said, the tree of ophthalmological science in Hungary is time-worn. After that in the Vienna University, the chair of ophthalmology in the University of Budapest is the oldest, and the ophthalmological clinic No. 1 attached to the Royal Hungarian University of Budapest has been in existence for over a century. The ophthalmological hospital at Nagyvárad was established by my grandfather eighty years ago. A book written by a predecessor of mine in the chair of ophthalmology, *Fabini: Doctrina de morbis oculorum*, was, in the early years of last century, employed as a text-book in the Universities of Italy and Holland. And the *Journal of Ophthalmology*, the present number of which is dedicated to you, gentlemen, is already in its forty-sixth year.

"Consequently, as the modest inheritors of this tradition, we have had no other duty than to maintain this level of ophthalmological science. With your permission, gentlemen, I will proceed to give a brief sketch of the position of this branch of science in Hungary.

"In the University curriculum, ophthalmology is on a level with the treatment of internal diseases and surgery. Lectures on the subject must be attended for two semesters, ten hours a week; it is one of the subjects for the third "rigorosum" (viva-voce examination to qualify for degree of M.D.); candidates for the degree of doctor of medicine are obliged not only to show their clinical knowledge, but, at a special examination held for that purpose, to display their manual skill as operating surgeons. This year a second chair for ophthalmology was created in the Budapest University, and two new clinical hospitals with 80 beds, for the use of both chairs, have been erected. There is a new clinical hospital, too, with 50 beds, attached to the chair for ophthalmology in the University of Kolozsvár. Of recent years three State hospitals for diseases of the eye have been established, one at Budapest with 112 beds, one at Szeged with 78 beds, and one at Brasso with 87 beds. Besides these, there are three State hospitals for the treatment of trachoma, the transformation of which into general eye hospitals is imminent. In the Budapest hospitals there are six ophthalmological departments with 172 beds, and in those in the provinces 14 such departments with 457 beds; so that in all there are 1,239 beds in the country for patients suffering from diseases of the eye. The fact that during the past five years the number of such beds has increased by 390 is a very reassuring one, and there is every prospect of the work of development being continued.

"Besides offering facilities for effecting cures, the Hungarian State has done its best in the prophylaxis. The organisation of the fight against trachoma is already one of 25 years' standing. As early as 1886 a special Act was passed to check the growth of this disease, and to lead the work of overcoming the evil, the Minister of the Interior appointed a Government commissioner and a superintendent of public health, the former being a University professor, the latter a University lecturer (Privatdozent). These measures are the best proof of the fact that the State desires to employ the weapons of science in the battle against this disease. And the same fact is proved by the prize

offered by the Minister of the Interior for international competition, to be awarded to the best work treating of the ætiology of trachoma.

"Of our humanitarian institutions, the Institute for the Blind is of 80 years standing: not long ago it was transferred to a new building, and workshops have been erected for the employment of the blind adults.

"I have enumerated all these facts, not by way of boasting, but to explain our presumption in demanding our share in cultural activity of the greater nations. We are proud and happy that you have accepted our collaboration; we promise to be diligent fellow-workers, and shall never allow ourselves to forget that you are our masters.

"On the opening day of the Congress we greet you, gentlemen, with the respect and homage of pupils and younger brothers."

## FROM OUR SPECIAL CORRESPONDENTS AT HOME.

### GLASGOW.

#### THE NEW CANCER HOSPITAL (FREE), GLASGOW.

THE large extensions which were opened last week will form a valuable addition to this institution. The necessity for new hospital buildings has long been felt, for the experience of the last few years has shown that the existing hospital, which is about to be pulled down, is not suitable for carrying out the proper care of cancer patients. In saying this, there is no intention to cast any reflection on the judgment and thought bestowed on it when erected. At its opening it was spoken of as a well-equipped and well-planned hospital, and such it was as far as the money available and other circumstances would allow, but in practice it was found that it was not adapted for fully meeting the wants of the very varied class of patients that have to be admitted to a cancer hospital, and was quite inadequate to house the numerous staffs of the nursing and administrative departments of the hospital. The wing just completed is planned throughout on the lines of a modern hospital; the buildings, when completed, will comprise all the departments required for the treatment of cancer. Each room receives the maximum of light and air, and a flat roof has been provided where patients may exercise and be as much as possible in the open air.

For the accommodation of patients there are four large wards, each containing eight beds. A convalescent ward is also provided, and nine single wards, having a southern exposure; these will be used for patients requiring quiet and isolation.

All the sanitary annexes are contained in towers, which are entirely cut off from the wards, and are fitted with appliances of the most approved pattern. These apartments are all adequately heated, and various ingenious fittings and furnishings have been installed which will add materially to the comfort of the patients and the convenience of nursing.

The whole of the top flat of the north-east portion of the building has been ingeniously arranged as a research department. The light here is ideal, and the rooms have been carefully fitted up in a manner suitable for the work to be done. One of the objects for which the Glasgow Cancer Hospital exists is the advancement of the medical and surgical scientific knowledge of the disease, and in order to carry out such work properly and advantageously, fully equipped laboratories, staffed by a select body of workers, have been provided. The research department is located at the top of the hospital, with its chemical laboratory and other rooms, and will be found to contain all the needed accommodation.

The whole of the buildings are lighted by electricity and heated on the "Rock" system by means of radiators, each radiator being under direct control, so that the temperature of any portion of the building may be raised or lowered as desired. The patients will shortly be removed from the old portion of the

buildings into the new wards, and the older part will then be entirely rebuilt, bringing it into harmony with the new, and the directors hope to have the entire building ready for occupancy in six months.

## LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

### TUBERCULOSIS AND HEREDITY.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—All praise be to Lady Aberdeen and those who work with her for the purpose of benefiting mankind by trying to eradicate, or even to mitigate, any one of the many diseases that afflict the human race. Let her ladyship and all others inculcate the benefits arising from fresh air, judicious exercise, good food, cleanliness, moderate recreation, mental and physical comforts, elevation of morals, and as many of all the other good things as constitute ideal perfection—and good will result in proportion to the extent to which these things can be realised. Let us suppose they can all be fully carried out. When they are, are we to have a world with happy freedom from disease? Are all the "ills that flesh is heir to" to be driven back, and once more shut up in Pandora's box, there to remain for ever? I assert that it is not going to be so. No doubt, if all these happy conditions were realised, many persons otherwise doomed would have prolonged lives in perhaps fair or good health. But I say there are many persons, and will be to the end of time, who would not be safe even if all the above desirable conditions were attained. Will supplying the lower classes with all that wealth can give remove certain diseases or protect those classes? Are the higher classes exempt from those diseases? Are not tuberculosis, insanity, and cancer rife in all classes? I assert that these diseases are hereditary, and that it is because they are hereditary that they are so universal; and I say that, being hereditary, there is something more to be done than sanitary science can do. Of course, I know that we are now told that tuberculosis is not hereditary—that it is only the tendency that is inherited. Well, what is a tendency? I won't stop to mince words, but I say there is *something* transmitted that develops into tuberculosis under conditions favourable to its action. It is useless to deny that certain diseases are hereditary, and that they do not "run in families" from generation to generation even though an individual or a generation may be passed over. It is useless to tell us that tuberculosis is only contagious and not hereditary, and that the members of an afflicted family only take the disease from one another. If so, where does the first of them get it? How do they send it on to the next generation if it is only contagious? Take a case the truth of which I myself can vouch for. A family of ten children were born to a country couple. These children scattered in early life to earn a living for themselves; some left home before the younger members were born, and there was never any communication between them; others went to America at different periods, and made out their living many miles apart; some went as domestic servants to different places in this country, while some few more remained at home. Some of the younger members never even saw the elder ones. Yet all these died of tuberculosis; some in America; some returned to die at home, but only to find that the rest were dead or dying from this fell disease. Does the theory of contagion explain this? The "man-in-the-street," with his well-known keenness in discerning facts, will join me in protesting. The fact is, that the father of this unfortunate family, like many of his relatives who came before him, died of tuberculosis, and although he lived to a good old age, it was only to transmit the wretchedness he himself bore so long.

I won't dwell further on heredity, as I want to come to something practical, but I repeat my assertion that it exists beyond the possibility of rational doubt, and the sooner this is admitted and taken as the basis of combined and energetic action by the medical profession and by the public, the sooner will measures be

adopted that will effectually stamp out the three great scourges I have mentioned, and probably many others. As I said before, I believe in the great benefit to be derived from modern sanitary science as promoted by Lady Aberdeen and her fellow-workers, but there is much to be done over and above what can be accomplished by such methods. They are all palliative, and can never eradicate any one of the diseases I have mentioned. It is in our power to eradicate the whole of them, and many others, if we act firmly, and if the profession act with energy, and abandon theories that are misleading to the public. It is a fact that we can confer unlimited benefits on mankind without materially interfering with the welfare or happiness of those who are afflicted with the scourges above-mentioned, and which they are sure to transmit to future generations if nothing is done to prevent it. Taking heredity as a living fact, and making it the basis on which I found my views, I say that "the marriage of the unfit" is the cause, and operation the remedy. I need not remind any medical man of what vasectomy and salpingectomy can accomplish. These operations are not only safe, but simple, in the light of modern surgery. Let some able members of the profession think over the amount of good they could do by working out this matter. Parliamentary influence should be obtained, and some time should necessarily elapse before final success, but it will surely come some time; the human race requires it, and it is not too soon to begin, in order to check the degeneration generally admitted as already too widespread. Will someone begin—my time is up.

I am, Sir, yours truly,

AN OLD M.D.

### MEDICINE AS A CAREER.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—Your correspondent, "A Poor Practitioner," has either expressed or suggested forcibly enough the chief facts about the seamy side of professional life. The facts do not need any emphasising to those who are feeling their concrete force. The question is, can anything be done to improve the lot of the poor doctor; can anything be done to convert a calling which too often can be carried on only as a sordid trade, into a true profession, fit for cultivated, refined, and sensitive men? One thing is quite certain. The only large organisation of medical men capable of taking action—the British Medical Association—is doing, and has done nothing. I have been a member for many years, and can recall no effort by the Association to increase the political power of the profession or to promote in any way the material interests of its members. Any suggestion in this direction is mostly stigmatised as trades unionism. But trades unionism is not all vile. It is vile when it represents the narrowest, selfish motives, and disregards entirely the interests of the community and the State. These are not the motives of medical reformers, and it can be proved that improvement of the position of the rank and file of the profession would confer as much benefit upon the public as upon the practitioner. The British Medical Association includes only one half of the registered men in its membership. Is it not possible to start another society from among the 20,000 outsiders, with the objects I suggest? The medical profession has always done, and is now doing its duty nobly in the pursuit of pure science, for which it receives poor pay and no thanks, and in the promotion of every movement towards the prevention of disease; and this work would not be diminished by proper attention to their just claims upon society.

I am, Sir, yours truly,

ANOTHER POOR PRACTITIONER

Glasgow, September 17th, 1909.

### THE DECLINING BIRTH-RATE.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—This subject appears to be of absorbing interest to a good many of your readers. I remember reading the Presidential Address of Dr. Taylor (Birmingham) in your pages some three or four years ago. It was

the first serious pronouncement from one of our profession on a subject which is undoubtedly of national importance, and I have followed most of the correspondence which this address has from time to time produced in your columns, meanwhile eliciting the views of a good many people with whom I have been brought into contact; and the conclusion I have come to is that its national importance appears to trouble the conscience of very few. They consider it as a personal matter, to be decided as personal predilection or economic consideration may determine. For myself I do not think the deterioration or extinction of our race need be feared on the ground of a declining birth-rate; the same tendency is being exhibited in all civilised countries, and the apparent anomaly is most manifest in countries—not excluding Germany—where riches have increased. It is, therefore, not a question primarily of how many children people can afford to keep and educate, as the decrease is confined to the upper and middle ranks of the community, and the average number of births maintained only where there is most poverty and consequent physical and moral deterioration. As an example, I may mention that I have now a gardener in my service at a guinea a week; he is 27 years of age, and his wife has presented him with a baby every ten months. The four elder children are rickety, not one of them having a straight leg; the fifth is not yet on its feet. Would your correspondent, "A Student of Sociology," counsel this poor fellow to go on breeding until in process of time he brings as many of these young weaklings into the world as he has shillings in his wages? With this correspondent's views in the main I have every sympathy, and if the middle classes—the backbone of every country—thought less of their convenience and of the luxuries the curtailment of their families enable them to indulge in, I should be less disposed to fear the decadence of our race; but herein is the crux of the position—the well-to-do are failing conspicuously in their duty to the nation, whilst the poorer classes produce a continuous crop of weakly children for the taxpayer to maintain. This is the sad side of the picture that is too often lost sight of. The practical question then obtrudes itself: How would you remedy this? My answer would be by inculcating *prudence* in this as in every other phase of life to all classes alike.

I am, Sir, yours truly,  
A YORKSHIRE PRACTITIONER.

#### THE PSYCHIC TREATMENT OF INTEMPERANCE.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—I have read with the greatest interest the report published in THE MEDICAL PRESS AND CIRCULAR (September 15th) of the address delivered by Dr. J. H. Quackenbos on the psychic treatment of alcoholic intemperance.

Whilst, however, fully recognising the importance of acting on the higher human personality directly, by means of suggestion, when necessary, I would reserve hypnotic *cambriolage*—that is, the substitution of outside will for that of the patient—for exceptional cases only.

Dr. Quackenbos says that the advantage of this plan consists in "the rapidity of restoration to self-control, without the necessity for effect of will." This is, I believe, a dangerous doctrine, for permanent self-control can only result from re-education of will and character, and this is more surely effected by the frequent repetition of free auto-suggestion than by hetero-suggestion, even when the patient is consentant.

In his address Dr. Quackenbos only deals with the psychic side of treatment, but inasmuch that both forms of consciousness are conditioned by somatism, the necessity for remedying disturbances of physiological equilibrium is, even from a suggestive point of view, obvious.

Alcoholics, like other drug addicts, always suffer after the suppression of their habitual stimulant from depressions and *perversions* of different functions, and, amongst these, from heartflag, hyperchlorhydria, and general acidosis. The value of digitalis, sparteine, and of Vichy water is as great in these cases as it is in the weaning from morphia.

For the general irritability and depression which follow upon renunciation, nothing, however, can compare with the Turkish bath, which, besides having a powerful ideational effect, combines in itself, for this condition especially, the most perfect sedative and tonic action. It is, as Dr. Crothers has shown in his report to the American Association for the Study of Inebriety, a means of cleansing both soul and body, and of bringing about most expeditiously and efficiently that, for an ex-alcoholic, most desirable consummation, the *mens sana in corpore sano*. One of the great advantages, moreover, of the Turkish baths is that, by improving the neurasthenic condition, it enables an ex-addict to enjoy a bracing, tonic sea air climate, instead of being obliged, on account of post-alcoholic irritability, to resort to one more or less relaxing.

It is for this reason that I have for some years been in the habit of recommending Ramsgate, where the conditions alluded to may be associated, for this class of psychasthenic patients. The Granville, to which I send them when possible, is too well known to require any eulogy on my part, but, whilst recognising its many comforts and advantages as a quiet, ideal residential hotel, it is certain that its excellent baths would be greatly improved if the management could be brought to understand that the carpet in the sudatorium is a septic abomination, and that a tile or marble floor is a sanitary *sine quâ non*.

I am, Sir, yours truly,  
OSCAR JENNINGS, M.D.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—In the very interesting paper which appears in the last number of your journal, the author, Dr. John Quackenbos, although clearly describing certain classes of inebriates, and stating that vast numbers have been cured by hypnotic suggestion, has, unfortunately, left out the essential thing, namely, a full and minute account of the treatment. All I can find in his paper explanatory of hypnotism (or suggestion, as he also apparently defines the method) seems summed up in his statement that this, as he employs it, "is nothing but a straightforward, heartfelt, forceful appeal" to "the higher human personality," which when aroused is capable of dominating all that is base in man's nature. If expostulation, exhortation, and vivid description of the moral and physical ruin to which alcoholism leads were capable of weaning drunkards from their evil habit; if portrayal of the unhappiness and misery their conduct brings to those nearest and dearest to them could, unaided, bring remorse and reform, the cure of drunkenness would be in many instances a comparatively easy task. Everyone who has tried, and who has been helped by others whose moral power over the victims has been as great as can be conceived, has found that personal influence, even when founded on love and directed by high intelligence and strength of will, does not succeed in any save a very small percentage among confirmed slaves to the drink habit. If Dr. Quackenbos can explain his hypnotic system, so that it may be possible to use it in reinforcement of the moral means which we all commonly bring to bear, he will confer a boon of inestimable value upon all engaged in the treatment of intemperance.

I am, Sir, yours truly,  
MEDICAL TEMPERANCE REFORMER.

September 17th, 1909.

## SPECIAL ARTICLES.

### THE REPORT OF THE LOCAL GOVERNMENT BOARD FOR IRELAND.

THE Annual Report of the Local Government Board for Ireland for the year ended March 31st, 1909, has recently been issued. (a) It is of special interest as containing records of the work of the Board in some new fields of activity, notably in regard to old age

(a) Dublin: H.M. Stationery Office, 1909. [Cd. 4810]. Price 1s. 9d.

pensions and to the working of the recent Tuberculosis Act. Speaking of the work of the Board under the Old Age Pensions Act, the exceptional difficulties which stand in the way of the administration of the Act in Ireland are recounted. These have to do with the discovery both of the age and of the means of the claimants.

From the tables relating to poor relief we learn that there has been an increase over the previous year in the numbers of those in receipt of both indoor and outdoor relief. In the year 1907 the daily average number relieved indoors was 42,555, whereas in 1908 it increased to 43,172. As regards outdoor relief, there was an increase from 54,451 to 57,284. We are glad to note a considerable reduction in the number of lunatics, idiots, and epileptics in the workhouses. The number of trained nurses employed in the workhouses has increased by 8, to 227; this does not seem a large force for 159 institutions, with an average daily number of 14,845 patients.

The number of patients attended during the year by dispensary medical officers was 642,614, of whom 161,085 were attended at their own houses. There is a slight increase in the total of the dispensary medical officers' salaries, as well as in the fees paid for temporary services. The former sum is £101,086, the latter £14,963. Up to the present, graded scales of salaries for dispensary medical officers have been adopted in only 64 out of 159 unions.

We notice that there has been a considerable increase of typhoid fever during the year, and three considerable outbreaks occurred—one in Clontarf, one in Manorhamilton and Dromahair, and one in Kiltimagh. All of them were due to milk infection. Special reports are furnished by the inspectors of the Board dealing with these outbreaks, and of one of them, that relating to the Clontarf outbreak, we shall have something to say at another time.

On the subject of tuberculosis the Board quotes with approval a series of thoroughgoing resolutions carried at the International Congress at Washington, and then makes the astonishing statement that "these resolutions endorse the general outline of policy set forth in our Report for the year 1906-7, and to a large extent embodied in the Tuberculosis Prevention (Ireland) Act, 1908." Those who remember the persistent inertia of the Local Government Board until stirred into activity by the energies of Lady Aberdeen, and who reflect on the inefficiency of the boasted legislation, will be somewhat staggered.

Dealing with the Dairies, Cowsheds, and Milkshops Order, the Board remarks:—"We have strongly recommended District Councils, where the dairying industry is extensively carried on, to appoint veterinary surgeons as chief inspectors to supervise the work of the ordinary inspectors."

The regulations which the inspector has to carry out are framed for the inspection of cattle in dairies, and for prescribing and regulating the lighting, ventilation, cleansing, drainage, and water supply of dairies and cowsheds in the occupation of persons following the trade of cowkeepers or dairymen; for securing the cleanliness of milk stores, of milk shops, and of milk vessels used for containing milk for sale by such persons; for prescribing precautions to be taken for protecting milk against infection or contamination.

We find a difficulty in understanding why the Board should have exerted its influence to have veterinary surgeons rather than medical men appointed to these positions.

Special reports from the inspectors on various subjects contain many matters of interest, but our space is limited. Speaking of enteric fever in Galway, Sir Acheson MacCullagh says:—"Thirty-four cases of enteric fever were reported in this urban district during the year; 12 of these occurred in the No. 1 and 22 in the No. 2 district. The cases were notified at different periods, and from various localities throughout the town, and no common source could be assigned as to their probable cause. The milk supplies were very varied, and the analysis of the town water supply was most favourable."

This statement is hardly as frank as it might be. The facts are that last year a consumer in Galway submitted the water to bacteriological examination, and

the report, subsequently made public, showed that the water contained large numbers of *B. coli*. On this report being forwarded to the Urban Council, the Council, after some delay, ordered a further examination to be made. The report stated that but few *B. coli* were to be found. The Council ordered also a chemical analysis, but they have never published the result. Sir Acheson MacCullagh can hardly have been ignorant of these facts, and therefore we cannot help wondering if he thinks the presence of *B. coli* a "favourable" point in the analysis of a drinking water.

The report of Surgeon-Colonel Flinn on the outbreak of enteric fever at Clontarf contains so many points of importance that we are compelled to leave it over to be dealt with in a special article.

## MILITARY & NAVAL MEDICAL NOTES.

### FIELD AMBULANCE TRAINING FOR MEDICAL OFFICERS.

—An experiment with the Cavalry Field Ambulance was made at the tactical operations in the Southern Command. Two forces were supposed to have suffered casualties, one to the extent of 20 killed and 75 wounded, and the other to 10 killed and 45 wounded. The ambulance was reported by the military correspondent of the *Naval and Military Record* to have quietly dealt with the supposed victims, dead and wounded, and dealing with their sham wounds with the greatest dexterity. It was just the training the medical personnel required, and their work all-round was voted a success.

**NAVAL MEN'S TEETH, SIGHT, AND HEARING.**—The Admiralty having had under consideration the large invaliding out of the Service on account of defective teeth which occurs at the periodical "Boards of Survey" (as they are called in the Navy, while "Medical Boards" in the Army), it has published the following rules to be observed:—(1) No man is to be invalidated for defective or deficient teeth unless the consequences have already rendered him unfit to perform his duty, and in all such cases the resultant disease is to be specified in the Survey report. (2) No man with defective or deficient teeth who is on draft for foreign service is to be invalidated out of the Service merely because he is rejected for draft on account of the state of his teeth. An order has also been issued directing that eyesight and hearing are to be periodically tested with a view to obtaining information which will assist commanding officers in stationing the crew for action. In future, also, the medical examination of men for draft is to include eyesight and hearing tests.

**IDENTITY TICKETS IN WAR.**—At the Medical Congress, Budapest, a paper on the unification of cards of identity for the wounded in the field has been presented by Lieut.-Col. W. G. Macpherson, R.A.M.C., and it is expected this compassionate aim will be achieved. There is also an effort to bring about uniformity in the necessities and requirements for "first aid" in all armies.

It has been decided to discontinue the issue of woollen belts (more commonly known as "cholera" belts) to troops going to foreign stations, or moving from one colonial station to another.

A FORTNIGHT'S course of instruction for lieutenants on probation, R.A.M.C., at the Army Service Corps Training Establishment, Aldershot, is in future to be held in May, June, November, and December.

It has been sanctioned that an officer of the Indian Medical Service shall be appointed Professor of Biology at the Calcutta Medical College.

MAJOR B. G. SETON, Indian Medical Service, Secretary to the Director-General of the Service, has taken over the honorary Secretaryship of the Pasteur Institute at Kasauli.



## SUMMARY OF RECENT MEDICAL LITERATURE, ENGLISH AND FOREIGN.

*Specially compiled for THE MEDICAL PRESS AND CIRCULAR.*

**Sarcoma of the Ovaries.**—Lockhart (*Journ. Obst. and Gyn. Brit. Emp.*, XVI., 2). Cohn found malignant disease of the ovary in 16.6 per cent. of 600 cases of ovariectomy performed by Schröder. Leopold found a similar condition in 26 out of 116 laparotomies for ovarian tumours. Of all the malignant tumours of the ovary, sarcomata are those which are least frequently met with. The author has operated upon 65 cases for ovarian tumour. Of these, 14 were malignant, 7 were sarcomata, and 1 mixed sarcoma and carcinoma. Five of the tumours were primary and 2 were secondary, both ovaries being affected in one instance. It apparently affects multiparæ and nulliparæ equally, and may be met at any age. The very young are especially susceptible. The first period of exceptional liability ends at puberty, and the second extends from 25-45 years. Pain may be an early symptom, and this induced 5 of the author's cases to seek advice. Even after complete removal of the seat of disease one is not safe, as only 25-50 per cent. of the patients remain free from recurrence. From present knowledge all ovarian tumours ought to be removed as soon as discovered, and great care should be exercised not to allow the escape of any of their contents during operation. F.

**Fibromyomata Uteri.**—McDonald (*Journ. Obst. and Gyn. Brit. Emp.*, XVI., 2) reports 700 cases studied statistically and pathologically. The routine microscopical examination is not only of importance in regard of the tumours, but also the adjacent tissues removed at operation should be carefully examined. This has not been the case in many series reported, and therefore no other series is combined with this one of 700 cases. Analysis of the cases shows that the greatest number of cases came to operation between 40 and 50 years of age; less between 30 and 40; less than 3 per cent. of the cases were under 30. The tumours were single in about one-third of the cases. The largest tumour weighed 20 lb., removed from a woman weighing 65 lb. when the tumour was removed. Analysis of the degenerations showed hyaline degeneration in 18 per cent., and with the increase in the age of the patient was more frequent between 40 and 60 years of age. In 9 per cent. calcareous degeneration occurred, and was present in very few cases below 40 years of age; it was found most frequently between 40 and 50 years, with slightly decreasing frequency as the patient became older; it occurred 6 times out of 20 cases in which fibroids and adeno-carcinoma were associated. Cystic degeneration was found in 3 per cent., and seems to have some connection with sarcoma, 2 of the sarcomatous cases being cystic. Necrosis and inflammation were noted in all stages. Necrosis occurred mainly in large tumours, in which from the size or other causes the circulation was disturbed, and was found in 8 per cent., with increasing frequency as age advanced, being present in 20 per cent. over 60 years, 9 per cent. from 50 to 60, and less often in the three preceding decades. Adeno-carcinoma was found in 2.9 per cent., but in no case below 40 years of age, and increasing in frequency with the age of patients. Squamous cancer in .8 per cent. also showed the same relation to age—1 case below 40, 3 per cent. from 50-60, and 4.6 per cent. from 60-70. The proportion of these two forms of cancer is the reverse of the usual, as shown by Piquand. The relatively higher frequency of adeno-carcinoma with fibroids may be due to a common ætiological factor which may be in the uterus itself. There were 7 cases of sarcomatous degeneration in the 700 tumours. During the time the 7 cases were observed, there were 12 other cases of sarcoma of the uterus. The small percentage in this series may be due to the fact that no tumour was included unless it was distinctly shown to be a true sarcomatous degeneration. This form of

degeneration was almost constantly associated with necrosis or hæmorrhage. Chorion epithelioma was found in 2 cases, both after abortion; 1 infiltrated the substance of the fibroid tumour. The total malignant complications were 5 per cent., the adeno-carcinoma and sarcoma (nearly 4 per cent.) being due to or influenced by the presence of fibroids; there was only 1 below 40 years of age, and with each decade after 40 the percentage increased, being 5 in the fifth, 12.7 in the sixth, and 23.8 in the seventh. The tubes showed salpingitis or perisalpingitis in 27.5 per cent.; in most cases the diagnosis was made microscopically. The association of salpingitis with fibroids is probably often overlooked because of lack of macroscopic change. Appendicitis was found in 21 per cent., and the same applies to it as to the tubes; the effect of fibroids on both the tubes and appendix is largely mechanical. In this series fibroid tumours were found in 26 women at autopsy, and heart lesions were found in 11.5 per cent. of these. The changes were secondary to anæmia from hæmorrhage, or to malnutrition. In a series of 2,600 pregnancies, 13 cases of pregnancy and fibroids were studied. In 5 cases the placenta showed areas of necrosis, in 2 cases involving the whole thickness of the placenta. In several cases there were placental infarcts, and 1 showed moderate calcareous degeneration. In the series of 700 cases of fibroids, pregnancy was associated in 16 cases. In 1 it was apparently the cause of marked increase in growth, followed by necrosis; in 3 cases there was moderate increase of growth and necrosis. From these statistics the following conclusions are drawn: that fibroid tumours are liable in a large percentage of cases to dangerous changes and complications; that these dangers almost all increase in proportion to the age of the patient, particularly in the case of malignancy and necrosis—in the case of malignancy 5 per cent. from 40 to 50, 12.5 from 50 to 60, and 25 from 60 to 70. Necrosis occurs in 8 per cent. of all cases, and in 33 per cent. of cases at or above 60 years of age. It is obvious that the menopause does not bring a cure to patients with fibroids, but exposes them to more grave dangers. Were there distinctive symptoms by which the advent of malignant or necrotic change could be recognised, the dangers of expectant treatment would be diminished, but there are none, and after their advent they advance rapidly and greatly increase the dangers of operation. The expectant treatment offers nothing towards the cure of fibroids, but hopes that the menopause, though often delayed, will remove some of the symptoms. F.

**Ruptured Tubal Pregnancy Twice in the Same Tube, with a Normal Pregnancy Intervening.**—Pearson (*Journ. Obst. and Gyn. Brit. Emp.*, XVI., 2) records an interesting case, with the following summary of her history:—Jan., 1903, married; Nov., 1903, ruptured tubal pregnancy (left), loop of tube excised; Nov., 1905, normal full-time pregnancy; — 1907, ruptured tubal pregnancy (left), remains of tube excised; May, 1908, normal full-time pregnancy; Feb., 1909, four months pregnant. F.

**The Operative Treatment of Pelvic Infection.**—Mallett (*Amer. Journ. of Obst.*, LX., 2).—In discussing the operative treatment of pelvic infection, prophylaxis and palliative measures are not considered. Should the case be one of gonorrhœal endometritis, efforts should be directed to limiting the disease to that tissue. Should the tubes be involved, and resolution not occur, the case becomes an operative one. The best way to treat this condition is by vaginal section and drainage, for this can be done with safety during the acute stage, and the necessity for waiting until the tubes and ovaries are distended with pus and damaged beyond

repair can be avoided. As soon as any induration is felt in the floor of the pelvis, or the tubes and ovaries are found to be enlarged and tender, a vaginal section should be made regardless of the temperature. The tubes are examined, and the os abdominalis opened and drained. Inflammatory exudates are separated and entered with the finger, whether they be in the cellular tissue or in the pelvic cavity. When there is pus in the pelvis the vaginal route should be chosen, as it gives better drainage, less shock, and is safer, and is followed by less danger of intestinal adhesions. If it is desired to enucleate the diseased ovary and tube, the abdomen may be opened at the same sitting with less danger. When pus is diagnosed in the pelvis, no time should be lost in evacuating it, whether acute or chronic, provided the vaginal route is adopted and the abscess drained through the *cul-de-sac*. Care must be exercised in the after-treatment of these cases, because of the tendency of the opening in the tube to close and stop drainage; by attention to this detail many tubes can be saved from further disorganisation and restored to usefulness. F.

**The Prevention of Perineal Lacerations.**—Macomber (*Amer. Journ. of Obst.*, LX., 2).—After the cervix uteri is dilated to the size of a dollar or a little larger, and labour pains are active, the dilating bag of Champetier de Ribes, or a modification, is boiled, and introduced into the vagina. A bulb syringe is connected with the tube, and while the bag is held in place, a warm antiseptic or sterile solution is slowly forced into it. The tube is then secured by clamp, and the bag left to be expelled. The bag must be filled slowly, as the rapid dilatation causes pain and may do harm. Filling the bag should take 15 or 20 minutes. With the bag in place, the pains, while dilating the cervix, are also crowding down the bag and dilating the soft parts; thus the second stage is shortened, the cervix, being pressed between the head and the bag, dilates more rapidly. Many instrumental deliveries can be avoided, and labour terminated in a reasonable length of time and without laceration, by using the bag. The direction of the force is always towards the outlet, and not towards the centre of the perineum. As the bag is about to be expelled it should be constantly held so as to get the full benefit of its largest diameter. When the presenting part is much larger than the bag, a little chloroform should be given as it passes over the perineum, and the head should be held back and worked out between the pains. The author's record with the bag is 3 lacerations out of 85 primiparæ, 12 of which were instrumental. F.

**Induction of Labour at Term as a Matter of Routine.**—Wright (*Amer. Journ. of Obst.*, LX., 2), during the last three years, has followed the rule to induce labour within three days after the patient has reached term as a matter of routine in all cases. With regard to the diagnosis of term, the author considers that if the cervix is found to have been taken up, labour may be induced, and that it is better to be one or two weeks premature than to run the risk of being four or five weeks late. The method of induction is, to pack the vagina tightly with the patient in Sims' position; at the end of 24 hours remove packing and re-pack; if labour has not started, remove the second packing, introduce one or two bougies, 11 or 12 English size, and then re-pack. In most of the cases the use of the bougie is not necessary, and when it is used it is practically always sufficient. F.

**A Method of Obtaining Walcher's Position.**—Frankenthal (*Amer. Journ. of Obst.*, LX., 2).—Described at the Chicago Gynecological Society. The patient is placed on her side, the side which contains the part that is to rotate to the front, and then the harness is attached. The pelvic bandage, a wide sheet, reaching from the dorsal vertebrae to the end of the sacrum, is placed round the woman and attached to the side of the bed, so as to draw the abdomen over to the edge of the bed. Then a four-tailed bandage is placed across the chest, so that one end goes each side of the neck and one end round the side under each arm; this is attached to the other side of the bed, so as to draw the body across, so that the shoulders and

ilium are on the same line. Next a bandage is placed around and above the ankles, and attached to the side of the bed, where the chest bandage is fastened and drawn tight, so that the thighs are drawn up and backwards towards the shoulders at an obtuse angle; this angle can be increased after the patient has been in position for a little time by pushing the knees backwards, and if the liquor amnii has escaped in the meantime. The position is not painful, and the patient does not require constant attention as when in Walcher's position. The method is illustrated by photographs. F.

**A New Method of Inducing Local Anæsthesia.**—Ransohoff (*Lancet-Clinic*, August 7th, 1909) reports the following case:—Patient, æt. 72, had been suffering for three years from a chronic osteo-myelitis of the hand, which became so painful as to necessitate an amputation. An Esmarch bandage was applied below the insertion of the deltoid. Under infiltration anæsthesia the brachial artery was exposed, and the needle of a hypodermic syringe inserted into its lumen, and 1 cc of a 2 per cent. cocaine solution injected into the artery in the direction of the blood current. After the lapse of two minutes the anæsthesia was absolute, and an antibrachial amputation was done entirely without the knowledge of the patient. S.

**A Simple Operation for Prolapse of the Rectum in Children.**—Ekehorn (from *Med. Review*, August, 1909) describes an operation which consists in fixing the posterior rectal wall to the sacrum by a transverse suture, no incision of the skin or rectum being required. The prolapsed rectum is first replaced and held in the required position by the forefinger of the left hand. A moderate sized needle on a handle is now passed through the skin to one side of the extremity of the sacrum, and is carried through the soft tissues till it pierces the rectum and meets the finger, which guides it to the anal orifice. The needle is now threaded with stout silk, one end of which is drawn back with the needle. By a similar procedure the other end of the ligature is brought out at the same level on the other side of the sacrum. The two ends of the ligature are tied together over the skin. No dressings are required, and the patient need not be kept in bed. After a fortnight the suture is removed. No rise of temperature followed this operation in the writer's experience of four cases, and no inconvenience was caused by the presence of the suture after the pain of the operation had passed off. S.

**The Double-Filigree Operation for the Radical Cure of Inguinal Hernia.**—McGavin (*Brit. Med. Journ.*, August 14th, 1909) reports thirty-three cases in which he had used his methods of operation. He states that he has carefully excluded from his series of cases any in which there was even a remote prospect of cure by Bassini's method; consequently, he has reported no case which was not considered by others as well as by himself to be quite outside the scope of any operative method hitherto published. Twenty of the patients have been operated on from 1½ to 4½ years ago, and have been constantly engaged in heavy work since the operation, without using any truss. The largest inguino-scrotal hernia was in a seaman, æt. 62. It was 15 in. in length and 25 in. in circumference. The writer's method consists in strengthening the wall of the inguinal canal by the implantation of two filigrees of silver wire in the tissues in such a way that subsequent stretching or bulging is rendered impossible, and the necessity of a truss is entirely done away with. The filigree is made in two sections, a pubic and an iliac. The former is always made of the following dimensions: At the narrow end its width is ¾ in., at its widest end 1½ in. Its length is 1½ in., this being the usual length of the adult inguinal canal. The iliac section varies in size to meet requirements, but is usually 2½ to 3 in. long. The operation is at first conducted exactly as in Bassini's operation, except that the aponeurosis should be split to a point further out, and the peritoneum more freely separated from the posterior surface of the conjoined tendon

The pubic section of the filigree is placed upon the peritoneum, its narrow end being close to the pubic spine, and its wide end at the inner margin of the internal abdominal ring. The iliac section is placed beneath the aponeurosis in such a way that its inner end lies over the internal abdominal ring and upon the cord for a space of  $\frac{3}{4}$  in., and the outer end carried outwards and laid upon the surface of the internal oblique. Finally, the aponeurosis is sutured in place, and the wound closed. The author considers that the only disadvantage of the operation is that, if suppuration should occur, the iliac section, and possibly the pubic section, may shift their positions, or, if only a slight sinus should develop, that convalescence may be unduly prolonged. If suppuration occurs, and the filigree shift, the probability is, that cure will fail, just as it does in cases where no filigree is used. S.

## MEDICAL NEWS IN BRIEF.

### Sheffield Exhumation—Attendance and Signature on Certificate by Unqualified Assistant.

At Norton Cemetery, on September 7th, the body of Mrs. Alice Nicholson, wife of a carpenter, who died on August 2nd in Ecclesall Union Hospital, was exhumed by order from the Home Office.

The Coroner said that the husband reported to him that about June 26th this year he engaged Dr. Jones, of Wostenholm Road, to attend to his wife, who was expecting to be confined some time in August. The doctor visited her about 16 times previous to her confinement, and supplied her with medicine. He promised to attend her himself, if possible, at her confinement. When his wife was taken ill on Saturday, July 24th, the husband sent for Dr. Jones, but he was unable to attend, and sent his assistant, Mr. William Perry. The assistant arrived about 12.30 p.m., and attended the case. Twins were born. The assistant visited her again on Sunday, July 25th, about noon, and again on Tuesday, July 27th, just before noon. On the following day—Wednesday, July 28th—Dr. Jones himself visited the case in the evening, about 6.30. The husband did not see him, but was told that the doctor had remained with his wife about an hour. He ordered her removal to the Ecclesall Union Hospital, and she was taken away in the ambulance about 7.45 that night. On Thursday the husband received a message from the Union, telling him that his wife was seriously ill. He saw her at 11.30 a.m., and she told him that she was very comfortable and had been kindly treated. He spoke to the doctor in charge, who told him that she was suffering from puerperal fever, and was hopelessly ill. The husband visited her several times until her death on Monday, August 2nd.

Dr. Garrick Wilson said he had made a post-mortem examination. Five other medical men were present—Drs. Waldron, Jones, Graham, Simpson, Phillips and Williams. The body appeared to have been buried about a month. There were no outward marks of violence. The organs generally were healthy, and in a state consistent with death from blood poisoning. He could not definitely swear as to the cause of death.

Dr. Walrond, M.R.C.S., who acted as *locum tenens* at Ecclesall Union Workhouse during July, explained the history of the case after admission to the institution.

Answering a juryman's question, witness said:—My opinion is, as an independent individual, attending the case, that what I find might have occurred in any case, even if a specialist had been with the patient at the time of confinement. My opinion honestly is that it was due to neglect.

Dr. David Jones, surgeon, stated that his dispenser and surgery attendant had been with him 2½ years. He knew the dispenser was not a qualified medical man, but he had instructions to attend patients in case of emergency, if none of the partners in the firm were available. There were four qualified men in the firm. The dispenser was quite competent to act in that way. He had instructions always to report immediately to one of the partners. He had attended close on 300 cases of child-birth without a single mishap. Witness promised the husband that he would attend deceased

personally if possible. He was not away when the deceased became ill, but he had two urgent cases in hand. On reaching his surgery he found that the dispenser (Mr. Perry) had gone to deal with the case. The dispenser reported in the usual way. There was nothing unusual about the case. Next day witness had a very busy morning, with a serious operation, attended by all three partners, so he directed his dispenser to see Mrs. Nicholson. He reported that the case was going on satisfactorily, and that she could be safely left until Tuesday. Witness intended seeing her that evening, but had other urgent cases which kept him till 11 p.m.

The case was not visited the following day, and on Tuesday it would have been dangerous for him to visit deceased owing to another case he had attended. The dispenser again saw Mrs. Nicholson. On the Wednesday a message came to him at 3 o'clock asking him to attend personally. He promised to go in a couple of hours. As soon as he had got a specialist's opinion that it was safe for him to see Mrs. Nicholson, he went to the house. She had a high temperature, and suspicious symptoms of blood poisoning. He made a close examination of the patient, and strongly advised her removal to the Ecclesall Union Hospital. He secured her removal within an hour. This was on July 28th. The dispenser saw her on the previous day. In his (witness's) opinion, none of these suspicious symptoms were visible when last the dispenser saw her on July 27th. He believed that the same sequence of events would have developed if any qualified man had been in attendance.

The husband then called attention to the fact that when the certificate from the Medical Officer's department was filled in, Mr. Perry signed Dr. Jones's name instead of his own. Was that right? He did not see why, when he paid for a doctor, a man who was not qualified for the job should be sent. That sort of thing would not be tolerated in his trade. When he was paid for a job, he was expected to do it.

Dr. Jones, replying to the first part of the question, said it was not necessary for the doctor to fill in the form. The midwife or the father himself could do it.

A Juryman: But who signed your name?

The Doctor: I authorised that because it is purely a formal matter.

The Coroner: What do you say to this, doctor? The certificate is filled in by Mr. Perry, in the place where you ought to have signed it, as "D. T. Jones." Is that correct?

Dr. Jones: Yes. Mr. Perry delivered her, but on the Sunday I intended attending her myself.

The Coroner: But you did not attend her until she was a dying woman, and yet you are certified here to the authorities as having attended her, and you did not do anything of the kind. They may pass it and welcome if they like, but it is an improper way of filling in these certificates, because it is not true. (Hear, hear.) It cannot, therefore, be correct.

Dr. Jones: But it is so signed on Sunday, and I was going to see her that night.

A Juryman: But you did not attend her at her actual confinement.

Dr. Jones: No, but they only ask who is attending. It was filled up with my authority.

The Coroner: That makes it worse still.

The husband said Mr. Perry filled in Dr. Jones's name after he himself had signed the form.

Mr. Perry was understood to deny this.

The Foreman asked Dr. Ralph Williams, from the Medical Officer's department, if that sort of thing was accepted by the Medical Officer of Health.

Dr. Williams: We should not demand the personal signature of the doctor, but we should draw the conclusion that the doctor was attending the case, and not a midwife.

The Coroner: It is wrongly and improperly filled in—(hear, hear)—for the simple reason that it is a lie on the face of it. That cannot be right under any circumstances, and it would decidedly mislead the authorities to whom it is sent. But you need not deal with that any further than by adding that the woman died from puerperal septicaemia. If you think there was any irregularity, it is your duty to add it to your verdict for two reasons—hoping it may lead to a better

state of things in the future, and stop any irregularity that has occurred up to now, and to show people that they may not do this sort of thing with impunity. If a person has been attended by an unqualified man, she is in the position of not having been attended at all, so far as the law is concerned.

The jury retired to consider their verdict, and found that deceased died from natural causes, and added that they thought she should have been attended by a fully qualified doctor from the first.

#### Home Treatment of Tuberculosis in Dublin.

THE quarterly meeting of the Hospitals Tuberculosis Committee was held in 76 Grafton Street, Dublin, on Thursday, the 9th inst. Present:—

Her Excellency the Countess of Aberdeen, accompanied by Lady Pentland; Sir Arthur Chance (in the chair); Dr. M. F. Cox; Dr. Alfred Parsons; Dr. G. Peacocke; Dr. T. Percy Kirkpatrick; Dr. J. Lumsden, and Sir William J. Thompson, hon. secretary.

The report of Dr. Daniel, who had been placed by the Women's National Health Association at the disposal of the Committee to attend cases that were receiving no medical aid, was considered most satisfactory. It was felt that in this way a great want was being met.

The work done during the last six months by the two Tuberculosis Jubilee nurses working in Dublin was next reported. 247 patients have been attended—of these 125 were old cases, and 122 new cases.

In all, 3,504 visits were paid to the patients' homes. It is a significant fact that almost two-thirds of the patients themselves seek the nurses' aid. This is not to be wondered at when it is realised what is done for their patients through the Samaritan Committee, in addition to the actual nursing, help and advice which enables patients to carry out doctors' orders in their own homes. 63 families received nourishment; 30 received clothes, shoes, bedding, etc.; 10 families' rents were paid while the breadwinner was under special treatment; 87 children of parents suffering from tuberculosis were sent to the country through the Fresh Air Fund; 3 families of children were boarded out while the mothers were in hospital; 60 rooms were disinfected; 5 families were removed to more healthy homes; for 7 patients work had been obtained, and 16 patients had been admitted to Newcastle.

There were 66 families each occupying one room, and in 35 families more than one member was affected. The total earnings of the families attended when the breadwinner is ill is estimated not to exceed 5s. a week on an average.

Mrs. M. A. Sullivan, the Convener of the Samaritan Committee, reported "that £130 had been spent on tuberculosis cases since February, 1908, and that does not include subscriptions collected for some patients for Newcastle. Then a large quantity of clothing was given to patients; beds or beddings were equipped, and in addition all the charitable societies were generous in their help." Mrs. Sullivan will gladly receive any help for this good cause.

The nurse employed by the Terenure Branch of the Women's National Health Association reports that for four months she attended 22 consumption patients, and paid 214 visits. She also has been the means of giving a great deal of assistance to patients in the way of beds, clothes, nourishment, and in addition to the ordinary nursing.

The three nurses and the doctor remark that patients or their friends ask that their homes be disinfected. This fact together with that mentioned before, that two-thirds of the patients request the nurses' services, show that the people amongst whom the nurses work are commencing to understand something about the nature of the disease, and are themselves assisting in trying to stamp it out.

#### The Society for the Study of Inebriety.

THE next meeting of this Society will be held in the Rooms of the Medical Society of London, on Tuesday, October 12th, 1909, at 4 p.m. (afternoon meeting), when Dr. J. Milne Bramwell will open a discussion on "Suggestion and Its Role in the Treatment of Inebriety." Each member and associate is at liberty to introduce a visitor. We understand that the Council

have established a reserve fund to provide means for the furtherance of the work of the Society. Contributions are earnestly invited in order to assist in meeting the expenses of the Society, and in helping the conduct of scientific investigations and educational work relating to the study of alcohol and alcoholism. All contributions should be forwarded to the Hon. Treasurer, G. Basil Price, M.D., 53 Devonshire Street, Portland Place, London, W.

#### Royal College of Surgeons of England—Admission of Women.

THE Home Secretary has signified to the Council of the Royal College of Surgeons his decision to approve the by-laws regarding the admission of women to the examinations for the diplomas of the College. He has further expressed his willingness to sign the formal document which is to be submitted after the next meeting of the Council of the College on October 14th.

#### The Hospitals Bill in Parliament.

THE following is the text of the Hospitals Bill, introduced in the House of Commons by Mr. J. MacVeagh. It proposes to empower local authorities to strike a rate in aid of local hospitals:—

1. From and after the passing of this Act it shall be lawful for any district council, corporation, board of town commissioners, county council, or other rating authority to strike a rate not exceeding threepence in the pound on the valuation towards the erection or maintenance of any hospitals situated within the area of charge.

2. The allocation of any rates so levied shall be subject in England and Wales to the approval of the Local Government Board, in Ireland to the approval of the Local Government Board for Ireland, and in Scotland to the approval of the Local Government Board for Scotland.

3. This Act may be cited as the Hospitals Act, 1909.

#### Infection and "Rats."

In the House of Commons, on Friday last, Mr. A. King asked the Under-Secretary of State for India whether the Indian Government still adhered to the theory that plague in man is due to bites of infected rat-fleas; and, if they do not, what theory are they now acting on, and had they made such changes in their administration as are necessary to meet the new situation.

The Master of Elibank replied that the connection between bubonic plague in man and plague in rats was well established, and rat destruction continued to hold a prominent place among the preventive measures adopted by the Government of India. The Government of India was now considering an important scheme for the improvement of the sanitary service.

#### Death of a Consumptive under Christian Science.

SOME remarkable evidence (reported in the *Standard*) was forthcoming at an inquest held at Worthing, on September 13th, touching the death of Mrs. Lilian Elizabeth Harper, the widow of an electrical engineer, who died suddenly on Saturday from hæmorrhage of the lungs. Mrs. Harper, who was 39 years of age, had been suffering from consumption for the past five years, and until last Easter had been taking medicine prescribed by a London physician. On the advice of a sister she then consulted a local Christian Scientist, with whom arrangements were made for a course of Christian Science treatment.

This treatment, the Christian Scientist informed the coroner, consisted of prayers twice daily, for which a sum of 5s. a week was paid by the sister. The regular fee for Christian Science treatment, the witness added, was a guinea a week, but a great deal of work was not charged for. Asked if he gave the deceased to understand that her condition was curable by Christian Science, the witness replied, "All things are possible with God." Replying to another question by the foreman, the witness said that cases of fractured limbs would be taken to a surgeon.

In returning a verdict of death from natural causes, the jury expressed the opinion that the practice of Christian Science, especially in cases of serious disease, was harmful, and greatly to be deprecated, and, further, that the taking money for treatment was un-Christian.

## NOTICES TO CORRESPONDENTS, &c.

**NOTE.** CORRESPONDENTS requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

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MR. WINTON S.—The individual about whom you are making inquiries, although he gives it out that he has English qualifications, is not on *The Medical Register*, and we have reason to believe that those he possesses are of American origin. We know nothing of him personally, but the proceedings you describe are not creditable to the member of an honourable profession.

DR. JAMES H. (Chelsea).—The queries in your note to hand will be answered in our next, or by private letter, your communication having arrived too late for reply in our present issue.

### HOUSING AND TOWN PLANNING BILL.

THE Clause dealing with county medical officers runs:—"By Clause 68 (2) it is enacted that the Local Government Board is to prescribe the duties of county medical officers of health, although they are appointed by county councils and paid exclusively from county funds. Here again we submit that it is inconsistent with local self-government for the locality to appoint and pay, and for a Government department to prescribe the duties of the officers and vary them as it chooses. The best method would be to set out in the statute the duties of county councils with regard to public health and direct them to appoint a medical officer to assist in carrying them out."

MR. WHEELER (Liverpool).—The advertiser is one of the worst of quacks. Take no notice of his specious arguments and pretences and hold no further correspondence with him, or you will suffer in body as well as pocket as all his victims have done.

ONE INTERESTED.—The decrease of births is steady throughout the whole of England, but not nearly so great in Ireland and Scotland. But the death rate is also much below the average, consequently, although the population is not increasing at the same rates as formerly, it is always well above the loss occasioned by a diminished birth rate, emigration and other causes. You will find full details in the weekly returns by the Registrar-General.

### GERM-FREE MILK.

A CORRESPONDENT sends us the following:—"Are you sure this milk is free from germs?" inquired the cautious young housekeeper. "Yes, lady," replied the milkman, unguardedly; "we boil every drop of water that goes into it."

MR. J. N. N. (Glasgow).—The usual application for information was sent, but as no reply was received, it was considered that no reference was necessary.

SENIOR STUDENT.—You cannot do better, the book is an admitted success and deserves the encomiums pronounced.

ERRATUM.—In the letter in our last issue signed by Clement H. Sers, the expression, "urban industries can only provide a limited number with both," should read with *work*.

## Vacancies.

Great Northern Central Hospital, Holloway, N.—Resident Medical Officer. Salary £120 per annum, with board, lodging, and washing. Also Senior House Surgeon, Senior House Physician, Junior House Physician, and two Junior House Surgeons, all for six months. Salary of Senior Officers at rate of £45 per annum, and of Junior Officers at rate of

£35 per annum, with board, lodging, and laundry. Also Anaesthetist. Salary 10 guineas per annum. Applications to the Secretary.

Fermanagh County Hospital, Enniskillen.—House Surgeon (Anaesthetics). Salary £72 per annum. Applications to C. Wilson, Secretary. (See advt.)

Gorey Union.—Medical Officer for the Camolin Dispensary District. Salary £120 per annum, with Registration and Vaccination Fees, etc. Immediate application to R. Creighton, Clerk of Union. (See advt.)

Macclesfield General Infirmary.—Senior House Surgeon. Salary £100 per annum, with board and residence. Also Junior House Surgeon. Salary £60 per annum, with board and residence. Applications to the Chairman of the House Committee.

Royal London Ophthalmic Hospital, City Road.—Senior House Surgeon. Salary £100 a year, with board and residence in the Hospital. Applications to the Secretary not later than the 30th inst.

Wolverhampton and Staffordshire General Hospital.—Resident Surgical Officer. Salary £125 per annum, with board, lodging and laundry. Immediate applications to J. Stephen Neil, House Governor and Secretary, Wolverhampton.

North Staffordshire Infirmary and Eye Hospital, Hartshill.—Medical Secretary and House Governor, age not under thirty-five. Salary £500 per annum, non-resident. For further information apply to the Acting-Secretary.

Nottingham General Dispensary.—Two Assistant Resident Surgeons. Salary £160 each, with apartments, attendance, light, and fuel. Applications to C. Cheesman, Secretary, 12 Low Pavement, Nottingham.

County Asylum, Rainhill, near Liverpool.—Assistant Medical Officer. Salary £150 per annum, rising to £250, with furnished apartments, board, attendance, and washing. Applications to the Medical Superintendent.

Derbyshire Education Committee.—Assistant School Medical Officer under the County Medical Officer of Health. Salary £250 per annum, rising to £350, with £100 a year to cover travelling and other incidental expenses. Further particulars of Dr. Sidney Barwise, County Medical Officer of Health, Derby.

Stirling District Asylum.—Assistant Medical Officer. Salary £125 per annum, with board, etc. Apply, stating age, with testimonials, to the Medical Superintendent.

Royal Surrey County Hospital, Guildford.—House Surgeon. Salary £100 per annum, with board, residence, and laundry. Applications to the Hon. Secretary.

Plaistow Hospital for Infectious Diseases, London, E.—Junior Assistant Medical Officer. Salary £100 per annum, with all found. Applications to Dr. Biernacki, Medical Superintendent, Plaistow Hospital, London, E.

Bolton Infirmary and Dispensary.—Junior House Surgeon. Salary £100 per annum, with apartments, board, and attendance. Applications to W. W. Cannon, Esq., 20, Mawdsley Street, Bolton.

West Norfolk and Lynn Hospital.—House Surgeon. Salary £100 per annum, with board, lodging, and washing. Applications to H. R. Kenny, Secretary.

## Appointments.

CAMERON, M., M.B., C.M.Glasg., Medical Officer and Public Vaccinator to the Cere Parish Council, Fife.

HEATHCOTE, HENRY CHARLES, M.B., Ch.B.Vict., Medical Officer for the Newton District, Somerset.

PRATT, CHARLES CLARIDGE, L.S.A.Lond., Medical Officer for the Mordard Bishop District, Crediton (Devon).

PITTERCH, J. R., M.B., Ch.B.Edin., Certifying Surgeon under the Factory and Workshop Act for the Llangefni District of the county of Anglesey.

RISLEY, S., M.D., C.M.Edin., Honorary Ophthalmic Surgeon to the Sheffield Institution for the Blind.

SPIDSON, C. A., M.D., B.S.Lond., M.R.C.S., L.R.O.P.Lond., Honorary Assistant Surgeon to the Wolverhampton and Staffordshire General Hospital.

## Births.

CRABTREE.—On Sept. 12th, at Pelham, Hertfordshire, the wife of E. F. Crabtree, M.R.C.S., L.R.C.P., of a son.

TULK-HART.—On Sept. 20th, at 4 Gloucester Place, Brighton, the wife of T. Tulk-Hart, M.D., of a son.

## Marriages.

TOURS.—DAVIES.—On Sept. 15th, at St. Helen's Church, North Kensington, Henry John, second son of the late Berthold Tours, to Louisa Canning, only daughter of the late Gomer Davies, M.D.

## Deaths.

DAY.—On Sept. 14th, at Holly Hill, Emma, widow of William Henry Day, M.D., late of Manchester Square, London.

# THE MEDICAL PRESS AND CIRCULAR.

"SALUS POPULI SUPREMA LEX."

VOL. CXXXIX.

WEDNESDAY, SEPTEMBER 29, 1909.

No. 13.

## NOTES AND COMMENTS.

### Medical Witness Fees.

THE other day, or to be more precise, on the 15th of the present month, a fine public protest was made by Dr. Shaw in Brighton Police Court. In order "to maintain a principle," as he himself put it, he refused to give evidence until paid a fee of two guineas. A solicitor explained that witness had been paid one guinea, which was the full fee allowed by the scale, and he declined to pay more. As the doctor still stuck to his guns, the Town Clerk hinted that he might be detained by the Court until he complied. Dr. Shaw told the Court he had been put to great inconvenience by being brought into the case, and he objected to being dictated to by the complainant's solicitor. Eventually, however, he allayed the judicial storm by giving his evidence under protest—"and the case proceeded." Would that we had more Dr. Shaws in the medical profession. Were there anything like concerted and persistent action on the part of medical witnesses the Courts would soon learn that the special fees of medical men were just as sacrosanct as those of other folk.

### An Unpaid Fee.

THE present writer is reminded of an unpaid fee in a provincial County Court many years ago. He had been acting as *locum tenens* for a provincial practitioner, and in the ordinary course of practice was called in to see a child who was stated to have been injured by a school-master. An ulcer was shown on the leg in proof thereof, but it did not correspond with the history of the alleged assault, and, from a medical point of view, could not conceivably have been caused in that way. The writer came back several months later for another *locum tenens* post, and just as he was leaving the town was subpoenaed to give evidence by the child's parents in an action for damages. He was kept in the town for several days, at great inconvenience and some pecuniary loss, to give evidence in a trumpery case that broke down ignominiously, and he received no fee whatever. Had he been wise he had refused to give a word of evidence before his fees were paid. Most medical men have to learn this sort of lesson. If we all spoke out and acted like Dr. Shaw, of Brighton, lawyers and magistrates, not to mention judges, would soon accept the position. The key to success, in this as in other matters, is simply united action.

### Operation by a Midwife.

FROM time to time cases are reported which illustrate the inevitable tendency of the certified midwife to assume the rôle of medical practitioner. An extreme instance of the kind was investigated not long since in the

Chester-le-Street police court, where a certified midwife was charged with causing the death of a four-day-old infant. It appeared from the evidence that defendant had delivered the wife of a miner of a healthy male child. She said the child was "tongue tacked," and she would "nick it." She accordingly cut the frænum with a pair of scissors, but so unskilfully that the baby died of sublingual hæmorrhage. Luckily for the midwife, the prosecution took a lenient attitude and merely asked that the case be sent to trial. Counsel for the defence urged that there was no criminal neglect nor intention, a view adopted by the Bench, who dismissed the case, but expressed a hope that it would be a warning to defendant and others. The incident shows precisely how the skilled midwife is apt to develop into the unskilled medical practitioner. It is difficult to see on what grounds leniency is shown by police magistrates to women who deliberately transgress the legal limits of their occupation. One may naturally ask, if a midwife who performs a surgical operation with fatal results is to go scot-free, what offences are likely to be punished under the Midwives Act?

### Jaw Development.

THE amount of caries of the teeth, both primary and secondary, in civilised children of to-day is a matter which is rightly attracting much attention, and it is certain that no universally-recognised cure for the condition is yet forthcoming. It is very proper, indeed, that children in board schools should be taught to use the tooth-brush, but we doubt if this measure of cleanliness will really much affect the alarming amount of decay. In private and public schools where boys and girls use their tooth-brushes night and morning as a routine measure the caries rate is little, if at all, below that of the schools which receive the children of the labouring classes. In a paper read by Dr. Hollopetter before the American Medical Association, stress is laid on the capriciousness of the morning appetite of children brought up in slums, and he asserts that the frequent anorexia of these children is due to their insanitary surroundings. The first step in hygiene, then, is to get children to eat normally by providing them with healthy sleeping accommodation. The next point he dwells on is the necessity of developing the jaws by giving them food which demands hard chewing. He gives many instances of how the jaws, especially the mandible, become larger and more square on such diet, and he holds that adenoids are largely the result of feeding children on sloppy and pulpy foods. Similar views have been put forward by Dr. Sim Wallace, of this country, and we think that they deserve the greatest attention from those interested in this important matter.



## LEADING ARTICLES.

### MEDICAL LAW REFORM.

IF reform of medical law has at length been brought well within the sphere of practical politics, it is at least to some extent due to the fact that the subject has for years been kept to the front by THE MEDICAL PRESS AND CIRCULAR. In taking credit for what this journal has unquestionably achieved, it is not necessary to belittle the services rendered to the cause by professional contemporaries, and those who have devoted personal energies to it. To Mr. Henry Sewill must be given the credit of initiating the movement for a Royal Commission, and it is almost entirely owing to the propaganda that he has for years carried on within the British Medical Association that the Branches have discussed the matter, and carried resolutions urging their Council to action. That body has at last been persuaded to address the General Medical Council, which in its turn has induced the Privy Council to open an inquiry by means of a circular to medical officers of health, into the extent and effects of unqualified practice. Then, the Home Secretary, within the last few weeks, has virtually promised that a Select Committee shall be appointed next Session to inquire into the quack medicine traffic. We have always supported the contention, which has been urged throughout by Mr. Sewill, that any new medical laws based upon an inquiry from which the trade in quack medicines and apparatus were excluded must prove to a large extent futile, since a great part of fraudulent practice is conducted under the cloak of that traffic; and we think that efforts should now be directed to obtain a Royal Commission with the widest necessary scope and powers. A Royal Commission is, of course, merely a means to an end. It presents the only means by which the facts can be set out in a form beyond controversy. A Commission can make plain to all intelligent eyes that the foundations of coarse quackery are simply a mass of undiluted falsehood, a heap of lies, gross as a mountain, open, palpable. Quack practitioners selected from every class, and the proprietors of quack nostrums and apparatus confronted with sworn testimony as to the ingredients and mechanism of their pills, potions, and instruments, would be called upon by a Commission to justify their claims as miracle mongers; and there can be little doubt that the imminence of such an ordeal would alone in itself suffice to frighten out of existence great numbers of these gentry. A Commission would show that whilst legislation might improve the status of the legitimate practitioner, it would confer incalculably greater benefits upon the poor, suffering, and ignorant classes who have most claim upon the guardianship of the State. It has been found easy to frame laws which practically make it impossible for unqualified solicitors to practise under any pretence, and similar laws can be constructed for doctors. With regard to the traffic in quack medicines, and bogus apparatus, if any public prosecutor existed, charged with the duty of putting the law in force, a great deal of this fraudulent, cruel, and murderous

trade could be put an end to under existing statutes. The well-known case tried before Mr. Justice Lawrence at the Lewes Assizes two years ago demonstrated the efficacy of the laws against "false pretences"; whilst numerous cases in the police courts have shown how slight a modification of the Food and Drugs Act is needed to bring within reach of the law large classes of quack medicine vendors. The case for medical law reform is overwhelming; it is the duty of the profession for the sake of humanity, and even in spite of misrepresentation or calumny, to strive with all their might to force it upon the attention of statesmen, and leave upon them the responsibility for the continuance of abuses which, to those who realise their gravity, seem almost intolerable.

## CURRENT TOPICS.

### Candidates for Hope Hospital, Salford, and the Warning Notice.

THE issue of a "warning notice" in the *British Medical Journal* against applications for the senior resident medical posts in the Hope Hospital, Salford, has not had the desired effect. The salary is clearly inadequate for a position of so much responsibility and importance, and the medical profession have been advised to leave the Salford Board of Guardians severely alone. We regret to say, however, that four applications have been made for the vacancy in answer to an advertisement. The names of the three candidates asked to attend the Board, according to the *Manchester Evening Chronicle*, are: Dr. Jos. Rodriques, senior house surgeon, Stockport Infirmary; Dr. H. J. O'Sullivan, of the Lunatic Asylum, Cork; Dr. C. Haslewood, Blackburn. It is indeed unfortunate that any members of the medical profession should thus thwart the endeavour of their brethren to obtain a juster standard of professional remuneration. Possibly the issue of the "warning notice" may not be known to them, and in that case an explanation and a withdrawal may yet be forthcoming. In the face of the Hampstead Hospital notice, however, which was flouted by certain hospital consultants last year, it is difficult to believe that any efficient pressure could be brought upon the candidates for the Hope Hospital appointment, even assuming them to be members of the British Medical Association. At the last moment before going to press, we are happy to learn that none of the three selected candidates appeared before the Board, so that our surmise as to none of them having known of the warning notice was probably correct. We congratulate these gentlemen on their loyalty to the profession, and on the example they have set to others who should have needed no such admonition.

### Improved Housing.

THE Housing Bill, if it survive the Lords, must have far-reaching effects on the health of the community, and is perhaps the most important legislative measure likely to reach the Statute Book for many years. It is difficult, indeed, to estimate the number of ills and diseases which arise from bad housing. As was pointed

out by the Earl of Crewe, in the House of Lords, it is impossible to deal with the problem of excessive drinking so long as people live in intolerable houses. It is no wonder that the decent artisan in many cases prefers the relative comfort of a public-house "snug" to the squalor of his own home. It is difficult to imagine how healthy children could be reared in the surroundings in which many of the respectable poor have to reside. Moreover, in regard to tuberculosis, the settlement of the housing problem will do much to diminish the incidence of the disease. There is little use in attempting to inculcate lessons of personal cleanliness to people who have to live five in a room, and who have to carry every bucket of water up four flights of stairs. How maintain free ventilation in such tenements? If Mr. Burns' Bill does anything to abolish such conditions, and to give our working people a chance of living in cleanly, wholesome fashion, he will have deserved well of his country.

#### The Danger of Sun-Baths.

DURING the past few years various forms of "simple life" have attracted the attention of the public, and among the methods of escape from civilisation which have been advised and practised has been the shedding of clothes and return to nakedness. It has become, in fact, a popular amusement to expose the naked body to the air and the sun, and sun-baths have been vaunted as of great hygienic efficacy. In this country climatic conditions have not favoured this particular form of simple life, but in Germany and in America many people spend whole days in the summer alternately bathing in sunlight and in water. Most of us have inclined to think the custom a harmless, if silly, one, but Professor Grawitz, of Berlin, has discovered a quite imposing train of pathological symptoms arising therefrom. Among the most prominent are dermatitis, tachycardia, and irregularity of the heart. In some cases there was syncope from insufficiency of the heart, and in many there was enlargement of the area of cardiac dullness. Headache and general debility were frequent, and in some persons an unwonted nervous irritability was developed. Professor Grawitz warns the public against the indiscriminate use of sun-baths, a warning in which we are sure all sensible people will join.

#### The War Office and Soldiers' Bad Teeth.

THE restless pursuit of the ideal is apt to lead enthusiasts into situations that are grotesque and ridiculous. Something of the kind seems to have happened in the attitude of our army authorities towards the defective teeth of soldiers. A question asked the other day in the Commons showed that thirteen men of a crack hussar regiment, now under orders for service in India, were rejected as medically unfit on account of their teeth. The sum of £1 per head is granted for dental treatment in these cases, but the cost was estimated at a larger sum, and the men were given the option of paying the difference or of taking their discharge. Three of them paid the money and ten took their discharge. As to the economics of the incident, it would be desirable first to learn who made the esti-

mate, and whether more than one dentist was consulted. Secondly, the value of a trained hussar to the nation must be more than the £3, which we learn from another source constituted the higher estimate. Surely the War Office has made a bad bargain in losing ten trained soldiers for lack of a payment of £20. As to the possible injury to the health of the men, we think it unlikely that men presumably in fine physical condition would within a few years of service in India be incapacitated because of one or two decayed teeth. It would under such circumstances take many years to destroy the digestion and set up the proposed anæmia and other serious consequences often associated with prolonged dental decay. It is, of course, right that soldiers should have their teeth in good order, but there is no need to push a sound principle to absurd extremes. Misapplied science of this fantastic kind costs the taxpayer a pretty penny.

#### Infantile Mortality in Finsbury.

IN the course of a series of able and exhaustive special articles on the London Borough Councils, the *Standard* gives many valuable details as to the public health work in the various boroughs. In Finsbury among other good work, the average infantile mortality has been substantially reduced during the past three years. The deaths of infants under one year of age were 156 per 1,000 births in 1906, 127 in 1907, and 133 in 1908. Up to 1906, for some years a municipal milk depôt, entailing a charge of £500 per annum on the rates, had been kept up. It was, however, found that the great bulk of the 3,000 children born annually in the borough were not brought under the influence of the depôt. It was therefore decided to close it, and to formulate instead a scheme for health visitors. Two lady sanitary inspectors and a health visitor were specially appointed for the work. Infants of poor parents are now visited as soon as the birth is notified, and advice is given regarding the feeding and rearing of the child, whilst cases requiring surgical aid, food, clothing, etc., are brought to the notice of established charitable organisations ready to co-operate in the good work. The mortality tables just cited demonstrate the result. The scheme is costing the ratepayers less than a fourth of the previous outlay on the milk depôt. The first experiment of this kind was made by Alderman Broadbent during his mayoralty at Huddersfield, and it has yielded similar satisfactory results wherever intelligently carried out, and deserves imitation in every rural and urban district throughout the country.

#### Preservatives in Cream.

THE report to the Local Government Board by Dr. Buchanan on the preservation of meat, discussed in these pages a few weeks ago, disclosed the fact that formalin preparations were often grossly misused to overcome foul odours and other signs of putrefaction, so that meat really unfit for food might be placed upon the market. It is satisfactory to find, according to the report to the same authority by Dr. J. M. Hamill, that similar abuses do not seem to prevail in the case of cream, although the report shows that stringent limitations of the use of boron compounds as preservatives

are desirable, these, in excessive quantity, being capable of acting deleteriously on health. The difficulties of distributing cream fresh every day renders the use of preservatives necessary, and Dr. Hamill does not object to these, but insists that their presence and quantity should be always notified. A Departmental Committee declared that boric acid should not be permitted in amounts exceeding 0.25 per cent., whilst the cream trade affirm that no limit lower than 0.5 per cent. is sufficient. This difference of opinion has led to inconsistency in the administration of the Food and Drugs Acts by different local authorities, and has rendered the present position of the cream trade unsatisfactory, both as regards sellers and buyers. The question of cream is comparatively small and unimportant in the vast field of the national food supply. When this field is minutely surveyed, the difficulty of guarding the people against fraud and adulteration seems almost insuperable. No doubt even partial enforcement of existing laws does act as a deterrent upon many traders who would otherwise be entirely unscrupulous; but existing evils will never come to an end until the moral qualities of the trading community become raised, and the conscience of the dealer instinctively revolts against the carrying on of a dishonest traffic which at the same time inflicts damage upon the health of its victims. It seems a deplorable thing that at this period of twentieth-century civilisation society should be still obliged to arm itself against a host of bad citizens bent in so many directions of preying upon and misusing it.

#### Malarial Prevention in India.

SIR RONALD ROSS publishes in a leading paper an able letter on this subject. He argues strongly in favour of mosquito reduction for prevention of malaria in towns and crowded areas, although he believes that in rural areas quinine prophylaxis, assisted, if possible, by screening, is more appropriate. The measure he advocates tends to rid a town not only of malaria, but of other mosquito-borne diseases, one of which—filariasis—abounds in parts of India, and at the same time it does away with one of the worst pests of tropical life. Sir Ronald describes the difficulties of quinine prophylaxis, the distribution of the drug, and continued persuasion of the people to take it. He combats the view that quinine treatment is less expensive, and supports his opinion by reference to the results of the anti-mosquito campaigns in the Panama Canal zone, Ismaila, and elsewhere, results which were recently described in these columns. Sir Ronald Ross's letter owes its origin to the fact that the Indian Government has ordered a conference on malaria, which is to be held at Simla in October. He pleads for full discussion before a properly-constituted tribunal, and suggests that it is necessary to include engineers among members of the Conference, seeing that medical members' knowledge of drainage and public works must obviously be restricted. Sir Ronald Ross has made out a strong case in favour of his recommendations; it can hardly fail to be treated with respect by the Indian Government, to which his letter obviously is indirectly addressed.

#### Skin Radiation and Heatstroke.

SOME interesting observations upon heatstroke in the Royal Navy stokeholds have been communicated by Staff-Surgeon Oswald A. Rees. The production of heat, he points out, is due to chemical agency, whereas loss is controlled by physical causes. The small animal loses heat much more rapidly than a large one, and it is found that a small Navy stoker will lose heat more rapidly than a fat one, from the fact that fat has only half the conductivity possessed by muscle. The metabolism of a man of 180lbs. compared with another of 120lbs. is as 3 to 2, but, on the other hand, the fat man loses heat at a much greater rate by water evaporation. The negro has a distinct advantage in the stokehold, because a black skin radiates heat better than a white one. Another interesting fact pointed out by Staff-Surgeon Rees is that men working in the bunkers are not more subject to heatstroke than those working in the stokehold, although the bunker is by far the hotter place. The explanation is that the men in the bunkers become at once covered with a thin layer of coal-dust, whereby the radiating power of the skin is increased. Clothing impedes heat-loss, but much depends on its absorptive power. Over-feeding predisposes to heatstroke, for which the best remedy is the ice bath. There is still a good deal to learn about the important subject of heatstroke, and it is encouraging to note that the matter is being scientifically investigated at first hand.

#### A New Medical Society in Dublin.

IT may be thought by many that there are already enough medical societies in Dublin, and that any increase in their number must injure the vitality of those existing. The Society whose advent we announce this week, however, does not seem to come into conflict with any of the existing societies or clubs, and is, moreover, conceived on somewhat original lines. Its membership is confined to licentiates of the Apothecaries' Hall, an ancient corporation which has shown many signs of renewed activity in late years. Its title is to be "The Medical and Scientific Society of the Apothecaries' Hall," and its object is to invite recognised authorities—medical, scientific, legal—to deliver lectures on subjects likely to be of interest to licentiates of the Hall and other medical men. It is intended that meetings should be held each month during the winter session. The promoters of the Society hope that addresses to medical audiences on subjects not directly included in their professional studies will stimulate thought, and will have a good educational influence. It is not contemplated that any subscriptions will be required to carry on the work of the Society. The plan seems to us a fruitful one, and we are sure that many outside the number of the licentiates of the Hall will watch its development with sympathetic interest.

#### Radium and the Radium Institute.

THE price of radium appears to be rising instead of becoming less, as it was hoped would be the case. Some years ago radium was obtained

from the famous Austrian Government mines at Jachimsthal, Bohemia, at a cost approximately of some £600 per gramme. On the other hand, a single gramme recently obtained from that source is stated to have cost several thousand pounds. The British Radium Institute are to have 7½ grammes, which Lord Iveagh and Sir Ernest Cassell have ordered for it, and which is to be extracted from Cornish pitchblende at a cost averaging about £4,000 per gramme. It is, of course, possible that under the exceptional circumstances of the case the institution of a special institute is the most practical way of working out the therapeutic properties of radium. At the same time it is to be hoped that the doors of the institution will be thrown open freely to accredited scientific workers. Medicine is not an exact science, and the light of discovery not infrequently flashes from unexpected quarters. Anything like a "corner" in any branch of scientific medical research is out of touch with the breadth and catholicity that stamp great minds seeking after truth.

### The Peculiar People and the Public Prosecutor.

THE death of a member of that curious sect the Peculiar People (one of whose tenets is the substitution of prayer for skilled medical ministrations) once more calls attention to the legal position of persons implicated in such transactions. Elsewhere in our columns a short account is given of the death, at Southend, of a woman belonging to the sect in question. The cause of death was intestinal obstruction, and the Coroner stated his confident belief that the unfortunate woman's life would have been prolonged, if not saved, by surgical operation. Addressing himself to those who had attended deceased during her illness, he told them they were responsible for her death. Finally, according to the newspaper report, he said that but for the fact that the woman's complaint was a complicated one, he should have sent the depositions to the Public Prosecutor. It is difficult to follow this line of argument, for most folk would probably maintain that the more complicated the case the grosser the offence of treating it with such spiritual remedies as anointing with oil and the "laying on of hands." The Public Prosecutor would do well, in the interests of the community, to look closely into these cases, as well as those of the Christian Scientists, who agree with the Peculiar People in the blasphemous substitute of religious rites for established medical treatment. The difference between the two sects is chiefly social. The Scientists are wealthy and live in the West-end, while the Peculiars are poor and dwell in the East-end. Both sects require the services of the Public Prosecutor from time to time, following those of the coroner.

### PERSONAL.

THE Lord Mayor of London, Sir George Truscott, on Saturday last laid the foundation stone of St. Mary's Hospital for Women and Children, Plaistow.

MR. WILLIAM BROWN, B.Sc., Lecturer in Electro-Technology at the Royal College of Science for Ireland, has been appointed to the Chair of Physics in the College.

AFTER thirty years' service on the staff of the Adelaide Hospital, Melbourne, Dr. J. C. Verco has resigned his position as honorary physician, and has been appointed consulting physician to the institution.

THE Earl of Stamford will preside at a reception to members of the Child Study Society, on Thursday, October 7th, at 90 Buckingham Palace Road, London.

DR. GEORGE WILSON, who for thirty-six years has been medical officer for the Solihull District, and Mid-Warwickshire Joint Sanitary Authority, has resigned on account of failing health.

MR. J. BLAND-SUTTON, F.R.C.S., has made a donation of £1,000 towards the fund which is being raised for the purchase of an athletic ground for the medical school attached to the Middlesex Hospital.

SIR VICTOR HORSLEY, F.R.S., will present the prizes to students of the Royal Dental Hospital of London, on Wednesday, October 20th, at the Royal Institute Galleries, Piccadilly, London, W.

THE Medical Congress, which has just finished its session at Budapest, has been graced by the presence of no less than 800 women, whose special committee was presided over by an accomplished lady, Madame Bokáy.

DR. ERNEST T. ROBERTS, certifying factory surgeon for the district of Keighley, has been appointed by the Glasgow School Board as chief medical officer for the inspection of children under the Education Act of last year.

AT Zurich, recently, a number of friends and former pupils assembled from all parts of the world to celebrate the seventieth anniversary of Professor George Lunge, the well-known authority in chemistry. Dr. Lunge, who was born in Germany, is a British subject.

APPLICATIONS for tickets of admission to St. Paul's Cathedral at the annual medical service of the Guild of St. Luke should be made to Dr. C. S. A. Farrer, 1 Harley Street, London, W. The service will be held on the evening of Wednesday, October 20th.

LAST week Miss Stebbington, a nurse on the staff of the North-Western Fever Hospital, was complimented on her courage in securing the capture of a street thief, whom she pluckily pursued. The accused snatched a gold watch and chain, and was sent to three years' penal servitude.

A MOVEMENT is on foot for the purpose of making some appropriate recognition of the long and distinguished services of Professor John Cleland, on his retirement from the Chair of Anatomy in Glasgow University. A circular letter has been sent to all graduates, and the form of recognition will depend ultimately on the amount subscribed.

THE Rev. E. L. Adams, of Scarborough, has bequeathed £4,000 to the Manchester Royal Infirmary for a new ward; £4,000 to the Victoria University, Manchester, to found a scholarship; £4,000 to the Scarborough Hospital for the permanent endowment of a children's ward, and £500 to the Smedley Memorial Hydropathic Hospital, Buxton, for the endowment of a ward. The three first items were reduced before the death of the testator by £500 each, because of the new estate and death duties of the Budget, which he regarded as "most unwise and unjust."

# A CLINICAL LECTURE

ON

## TWO CASES OF INTESTINAL OBSTRUCTION. (a)

By J. RUTHERFORD MORISON, M.B., F.R.C.S.,

Lecturer in Surgery in the University of Durham; Senior Surgeon to the Royal Victoria Infirmary, Newcastle-upon-Tyne.

FOR the notes of the first case to which I wish to draw your attention I am indebted to my late House Surgeon, Dr. Walker.

*Case 1.*—A man, æt. 56, was admitted to the Royal Victoria Infirmary on February 14th, 1909, very ill with acute intestinal obstruction. As soon as I saw him I recognised an old friend whose past history, though it may or may not have any bearing on his attack of obstruction, is full of interest. For years—not less than 15—he had come more or less regularly for demonstration to generations of students as a typical example of leucoplakia which had followed syphilis, and was associated with the abuse of tobacco and alcohol. From time to time his tongue had been obstinately ulcerated, and the probabilities of cancer developing there had frequently been discussed. All sorts of lotions and paints and medicines were tried in the hope of improving his tongue, but it is safe to say that very little benefit had been derived from any of them, and that when the ulcers healed it was more because he smoked and drank less than from any remedies he had been using.

Ten years ago (April, 1899) I removed his left testicle for septic broken-down syphilitic gummata.

Four years ago he was advised to try X-rays for his tongue, and it is of interest to note that this somewhat extraordinary prescription not only gave him relief from all the discomforts which he had in it, but that all the ulcers healed, and the condition of the tongue generally was so much improved that I was surprised to see it.

To return to his present illness the history was:—

That for about five years he had had troublesome constipation with occasional attacks of pain in the left hypochondrium, but no vomiting. Since August, 1908 (six months ago), the pain had been almost constant, and had frequently prevented him from sleeping at night, and was accompanied by occasional vomiting. For the last two months he had frequent attacks of pain accompanied by loud rumblings, during which he had been unable to pass wind or motion. He also had during this time frequent diarrhoea with slimy, offensive blood-stained motions. He had been steadily getting thinner, but had no record of his lost weight.

For five days previous to admission the pain in his left hypochondrium made him shout out and vomit frequently. He had passed a motion after an enema, but had voided no flatus, and felt very ill.

On admission (February 14th, 1909) he looked ill. His visible arteries appeared to be much thickened. His temperature and pulse were normal.

Examination of the hernial sites and rectum revealed nothing. The abdomen was swollen and tympanitic, and the distension was most marked on the right side. During a spasm of pain the distended cæcum could be mapped out and felt to harden, and the ascending and transverse colon also stood out prominently during the paroxysm. The pain was always referred to the left hypochondrium, and tenderness was present on pressure there.

The diagnosis made was intestinal obstruction due to a malignant stricture in the splenic flexure of the colon with hypertrophy and distension of the cæcum and colon, proximal to the stricture, the contents being actively virulent in consequence of colitis and retention above it.

The treatment suggested was (1) *Lavage of the Stomach*. (The stomach contents were to be washed out as frequently as required to prevent vomiting.)

(2) *No food was to be administered by the mouth, but by enema*. (Every two hours 1 pint of equal parts of fat beef tea and milk with one teaspoonful of salt and half an ounce of whisky were to be given slowly through a rectal tube and raised funnel.)

(3) *Small doses of opium to relieve pain*. (When the patient was restless or in pain, 10 min. of liq. morphia hydrochloratis in 1 dr. of aq. menth. pip. was to be given.)

(4) *Heat applied to the Abdomen*. (A hot poultice of linseed meal, large enough to cover the whole abdomen, was to be kept on for one hour, then to be replaced by heated cotton wool for seven hours, when the poultice was to be repeated.)

*After progress.*—No material benefit followed this treatment, and the stomach contents developed a definite faecal odour.

Two days after admission (February 16th), the failure of medical treatment to give relief, I made a small incision in the right iliac fossa, drew forward a piece of the anterior wall of the cæcum, opened it, tied a Pauls' tube in for drainage, and fixed the whole with harelip pins (cæcostomy).

Two days later, after abundant discharge from the tube, the patient was entirely relieved, and by injections through the cæcostomy opening and from the rectum the colon was cleansed and the obstruction was localised in the splenic flexure.

Second operation March 13th, 1909 (a month after cæcostomy). The abdomen was opened through the left rectus muscle and a growth was found in the splenic flexure of the colon. This could not be drawn forward till it had been mobilised by division of the peritoneum forming the upper layer of the meso-colon, but division of this allowed the greater part of the transverse and descending colon as well as the splenic flexure to be lifted out on to the abdominal wall. Enlarged hard mesenteric glands were felt in the mesentery

(a) A Clinical Lecture delivered on June 10th, 1909, at the Royal Victoria Infirmary, Newcastle-upon-Tyne.

near the growth. Half of the transverse and descending colon with a corresponding portion of mesentery was excised with the growth, the ends of the bowel were closed by sutures, and a large lateral anastomosis was established by sutures between the remains of the transverse and descending colon.

On March 27th (fourteen days later), after free irrigation of the colon the cæcostomy opening was closed, and on April 8th (twelve days later) the patient left the Infirmary with his wounds healed and feeling well.

Note in the growth removed (exhibited) the tight stricture looking from the outside as if a piece of string had been firmly tied round the gut. Note also the hypertrophied and dilated bowel above the pale, thin, contracted colon, and a quantity of fat in the pucker round the growth. This is typical of adenocarcinomatous stricture of the intestine.

Patient, æt. 35, admitted to private hospital on June 11th, 1909. She was in her usual good health till four days before, when she developed a cough, coryza, temperature 100.6°, and slight abdominal pain. These symptoms persisted, but her medical adviser, herself and friends all regarded the illness as in no way serious till 11 o'clock on the day of admission. She was then suddenly seized with a severe abdominal pain, vomiting and collapse, and the pain and vomiting had persisted till her admission five hours later. (She was driven twenty-one miles lying in a motor car.)

On admission she was collapsed, her face and hands were a bluey red colour and cold, her pulse 82, though so feeble as to be scarcely perceptible, her tongue dry, brown and bile-stained, her temperature normal. There was no history of any previous abdominal illness whatever.

On examination there was nothing discoverable in any of the hernial sites or from the rectum or vagina. The abdomen was distended and slightly tender all over, but nowhere rigid. During a paroxysm of pain, which was very severe, the intestines could be seen to distend and felt to harden and to assume the ladder pattern characteristic of an obstruction involving the small intestine. The paroxysm appeared too end with a gurgle in the right iliac fossa.

The diagnosis arrived at was:—Acute intestinal obstruction from block of the small intestine, with strangulation of a considerable area of the gut, and as a possible cause Meckel's diverticulum.

The patient had been conveyed direct from the motor to the operating table, and a quarter of an hour after her admission and after her stomach was washed out, she was anaesthetised for operation.

**Operation.**—The abdomen was opened in the middle line by excision of the umbilicus, and the diagnosis of acute intestinal obstruction was confirmed by the escape of a quantity of blood-stained serum and the appearance of congested distended coils of small intestine. The cæcum was found to be pale, contracted, and empty, and the coil of ileum entering it in a similar condition. This was followed upwards till the point of obstruction, between two and three feet up the ileum, was encountered. Above this the bowel was large, tense, with a quantity of fluid contents, bluish and congested, below it small, empty, and pallid. The obstruction was caused by something fixing acutely and kinking the ileum on the outer side of the cæcum and ascending colon, and on separating this adhesion pus escaped. This

was at once mopped up and the bowel was set free. After cleaning away the pus a gangrenous perforated appendix was turned out of the abscess cavity and excised. The abdominal wound was closed except at the lower end, from which a drainage-tube from the pelvis emerged.

Her recovery up to date has been so straightforward that I may—almost four days after the operation—say she is well. (Her recovery subsequently was uninterrupted.)

These cases serve to illustrate the two most important divisions of intestinal obstruction, viz., acute and chronic, and give me the opportunity of offering certain remarks upon diagnosis and treatment.

Before entering into further detail I must emphasise the need for examination of the hernial sites and of the rectum in all such cases. It is impossible I should overrate the value of this because so many times the routine examination has discovered for me an unsuspected hernia or an obstruction palpable from the rectum. The diagnosis is then so easy as to require only ordinary care, but it must be recognised that a diagnosis may be so difficult as to be impossible with the greatest care and extraordinary skill.

In every case of acute sudden abdominal pain attended by vomiting, this question has to be answered, Is it obstruction?

There is a Trinity of signs on which the greatest reliance may be placed in answering this question. If the patient has severe griping pains, inability to pass flatus, and there is evidence of increased peristaltic intestinal movements, a diagnosis of intestinal obstruction is safe. If these three signs are not all found in company some doubt must be felt. Text-books still maintain the tradition that intestinal obstruction means inability to obtain a motion of the bowels, and this teaching is responsible for many serious errors in diagnosis, for it is not true. It is possible for a patient to pass no motion for weeks, but that does not constitute intestinal obstruction. It is possible for a patient with intestinal obstruction and the three signs described to have a copious evacuation. If the bowel below an obstruction contains fæces at the time of the attack these are likely to be expelled if an enema is administered, but the evacuation fails to bring with it any flatus. This is the crucial test, *the obstruction to flatus*. It is this obstruction that starts the agonies of intestinal obstruction. When flatus is arrested a condition is started in the intestine resembling panic in a crowd, and like this tending only to terminate in disaster. The next questions to be answered are, "Where is the block?" and "What is its nature?" These questions have to be answered for each individual case, and may present grave difficulties.

In the first case the diagnosis was easy. We were able to say that the patient had intestinal obstruction at once. Where was the block? The age of the patient suggested malignant stricture of the colon, for this is the most ordinary cause of intestinal obstruction in patients over 40, but the stricture is usually in the sigmoid flexure or in the rectum.

The constipation with painful rumblings and occasional "diarrhoea" support this view. "Diarrhoea" is Nature's cure for the obstruction. When the bowel above a stricture is irritated by solid fæces which cannot pass, its mucous membrane inflames, secretes large quantities of fluid



in which the hard faecal masses are dissolved, and these are then enabled to pass through the stricture accompanied by mucus and blood-stained discharge from the inflamed colon. The rumblings are also caused by Nature's effort to overcome the obstacle by increased peristaltic contractions of the bowel, and are sometimes so loud as to be heard at a considerable distance from the patient. The pain in this case was felt, as it may be, in the position of the obstruction, and this probably depended upon its long duration. I have frequently observed that in the early hours or days of abdominal pain the patient has been unable to localise it. Later and after some experience the power to do this increases, till finally, when it has been of long duration, the exact spot affected by disease may be picked out as the seat of pain. This looks as if the visceral nerves required education for localisation, and if the history of five years' duration be correct they had abundant opportunities. The stricture was due to cancer, and some of you may wonder at my belief that this cancerous stricture could have been there for five years before leading to dangerous obstruction. Such a statement would have surprised me a few years ago, but I have now learned concerning malignant disease of the large bowel that on the one hand it may be the most malignant of malignant growths, that a small cancerous ulcer may be followed in a few weeks by secondary deposits in the peritoneum, mesenteric glands, liver, and by death, or, that on the other, it may grow so slowly as to take years to kill its victim. One patient under my care, and on whom I made a post-mortem examination, had an advanced malignant growth of the rectum diagnosed twelve years before his death, and during his last seven years' of existence all faeces were passed through a colostomy opening. The disease had never extended beyond his pelvis, death was caused solely by extension into his pelvic structures, and until the microscope had settled that this was a typical columnar-celled carcinoma I felt some doubt as to the diagnosis. A single case proves nothing, but several of my patients have lived for more than five years after a colostomy for growths in the sigmoid and colon so advanced as to have appeared to be unfit for removal. I can therefore ask you with some confidence to accept the history of five years' pain in the splenic flexure of this man's colon as an indication that he had malignant disease there for that time.

You will note the point that I have previously emphasised concerning the enema, that though a stool followed its use no flatus was passed, but this is typical of obstruction either in the small or the large intestine and has no localising value. The chronicity of his illness also suggested a block in the large intestine, for chronic obstruction is usually due to this, and acute obstruction to an interference with the small intestine, though there are so many exceptions to this rule as to make it of small practical value.

The point to which we attached the greatest importance was based on a physical sign. It was the enlargement of the right side of the abdomen by a portion of distended intestine which we believed to be the caecum. If it is certain that the caecum is distended this evidence alone suffices. The block will then be found in the colon as it was in this case. That the colon would be hypertrophied, dilated and inflamed above the ob-

struction was easy to prophecy on general principles, and we know that it always is.

You are likely to wish to know my reasons for not operating at once in this case as I did in the next, and they are these.

It was impossible to do a radical operation for removal of the growth and restitution of the colon, the bowel being distended by septic contents, with any reasonable chance of success. A painful experience has taught us that however successfully the operation may be performed under such circumstances the patient is almost sure to die.

Experience has also taught us that the methods we adopted sometimes suffice temporarily to relieve the obstruction and allow, after the bowel has been emptied, of a radical operation. If this cannot be effected three operations instead of one are necessary, and the increased risk of waiting is counterbalanced by this consideration.

Our first method failed, and we were forced to operate, first for drainage, second to remove the growth, finally to close the drainage opening.

In the second case the diagnosis of acute intestinal obstruction, the block being in the small intestine, was based upon physical signs which could not be misunderstood. We ventured further, and in doing so made a mistake. There is fortunately nothing to regret, for it was not detrimental to the patient, and in order to make any advance in surgery or in anything else it is necessary to venture as far as possible for only such exercise is a sufficient stimulus to the gaining of new knowledge.

How did the mistake occur?

First in an insufficient history. It is likely that if the story of the preceding day's illness had been fairly unravelled a clue as to the appendix would have been obtainable.

Second and chiefly from a belief in the probability that such a sudden and serious illness was due to strangulation of a large portion of the small intestine that it was unlikely to be due to anything but an encircling band, and that there was no history of any illness likely to produce such a band. From this case we learn that obstruction by a kink with vascular disturbance in the bowel above may, just as a strangulation will, give rise to blood-stained fluid in the peritoneum and severe collapse.

Before concluding, I would like to remark concerning treatment, that the results in cases of acute obstruction of the small intestine are little if any better than they were twenty years ago, whereas the results in chronic obstruction, especially affecting the large intestine, have enormously improved. Why is this? It is because operative *technique* has made such strides during that time and operative skill has a considerable influence on the statistics of colon obstruction. Operations for colon obstruction mostly require the difficult operation of resection for their radical cure, and this has been perfected during that time. But operations for the radical cure of small intestine obstruction have not been influenced much, if at all, by surgical progress. They are nearly all simple—e.g., the division of a band, the separation of adhesions, the withdrawal of a strangulated loop, and these could be done as successfully twenty years ago as they can be now.

The lesson we learn is, that early diagnosis and immediate operation are of far greater importance than operative skill, and no improvement in

results can be expected until this has been acknowledged and acted upon. Then patients will recover from acute intestinal obstruction as they now recover after operations for strangulated hernia.

NOTE.—A Clinical Lecture by a well-known teacher appears in each number of this journal. The lecture for next week will be by R. Atkinson Stoney, F.R.C.S.I., Visiting Surgeon to the Royal City of Dublin Hospital. Subject: "Cancer of the Tongue."

## ORIGINAL PAPERS.

### RECURRENT HÆMOPTYSIS IN THE NON-TUBERCULAR;

#### TWO ILLUSTRATIVE CASES.

By JOHN HAY, M.D., M.R.C.P.LOND.,

Assistant Physician, Royal Infirmary, Liverpool;  
late Physician, Hospital for Consumption and Diseases of the Chest.

EXPECTORATION of blood is an alarming and arresting experience for a patient, and not infrequently a most valuable cue to the medical attendant. While it is the rule to find no difficulty in satisfying oneself as to the cause for the bleeding, there are occasionally instances where the pathology of the condition is anything but obvious.

A true hæmoptysis or a genuine expectoration of blood from the lungs signifies, as a rule, one of two conditions—pulmonary tuberculosis or valvular disease of the heart. The presence of heart disease can be recognised without difficulty; and as valvular disease is very rarely found in association with pulmonary tuberculosis, the recognition of undoubted cardiac mischief in any patient almost justifies the exclusion of tubercular infection. There are, however, many cases where it is not easy to exclude the tubercular origin of an hæmoptysis. Absence of physical signs and symptoms does not negative such an origin, nor does the freedom of the sputum from bacilli.

Hæmoptysis may be the first and only sign of phthisis, and I believe it is a good practical rule to view as tubercular in origin every case of undoubted hæmoptysis when some other easily ascertainable cause for the bleeding cannot be demonstrated. If, after careful examination and investigation, doubts still remain, they should, when possible, be put still further to the test by some of the more recent methods of inquiry initiated by Calmette, von Pirquet, and Moro, or the blood examined for the presence of the tubercle bacilli in the manner described by Rosenberger and Forsyth, who have proved that, with rare exceptions, the bacilli can be found in carefully prepared blood films obtained from patients with pulmonary tuberculosis.

In each of the two cases which I record, recurrent or intermittent hæmoptysis was a feature. Both patients presented some difficulty in complete diagnosis, and several points of interest in relation to recurrent bleeding from the lungs.

CASE I.—Woman, æt. 45, suffering from angio-neurotic œdema and recurrent hæmorrhage from the lungs and kidneys.

No history of any similar condition in either parent. When 14 years old, and again at 18, was attacked by acute rheumatism. She is still liable to occasional rheumatic pains. In 1899 she had double pneumonia, and it was subsequent to this that she first began to be afflicted with paroxysmal attacks of circumscribed œdema. In the last ten years these attacks have been frequent, and hardly a month has passed without one or more areas of skin

having been swollen and œdematous. The first, affected the left arm and hand; these became greatly swollen and slightly reddened, and, in addition, felt hot and itchy.

The portions of the body which have been involved at different times are the arms, forearms and hands, the thighs, legs, ankles and instep; at other times the ears, lips, skin beneath the chin, and the eyelids, either singly or both simultaneously. When the latter occurs it results in complete disappearance of the eyes. The face, the back of the wrists, and the instep are the areas most frequently involved.

The œdema is circumscribed, and not usually symmetrical; it is hard and solid, and does not cause pain unless pressure is applied. Pitting can sometimes be obtained when the œdema of the area is extensive and the larger part of the limb involved; movement causes pain, and necessitates the use of a sling. Severe attacks last three or four days, and the patient has to go to bed; on such occasions there is nausea and troublesome retching, but no actual vomiting, no diarrhœa, and no colic.

A purpuric rash has never been observed. The cause of the attacks, so far as it has been possible to decide, has generally appeared to be some indiscretion in diet—cold meat or stout for supper, vinegar or rich sauces, sardines, tinned meats, and wines of any kind, especially claret, have all on occasion proved the exciting factor; on the other hand, mental worry or overwork and want of sufficient rest in bed seem to have initiated an attack. There has never at any time been any epistaxis, hæmatemesis, or enlargement of the spleen.

This case obviously belongs to the group of œdemas termed variously, Quincke's œdema, angio-neurotic œdema, giant urticaria, and acute circumscribed œdema. The chief characteristics, as defined by Osler, are, "the occurrence of local swellings in various parts of the body—face, hands, arms, legs, genitals, buttocks, and throat"; "associated with the œdema there is almost invariably gastro-intestinal disturbances, colic, nausea, vomiting, and sometimes diarrhœa," and "a strongly marked hereditary disposition." In my case, in addition to the features already described, recurrent hæmoptysis and recurrent hæmaturia were noted.

The hæmoptysis dated back nine years, and was always associated with the appearance of circumscribed œdema. The blood came up in clots, and was usually unaccompanied by pain or dyspnœa. The most alarming attack of hæmoptysis occurred a year ago. The patient, on rising, felt in good health and started off for Blackpool, where she had arranged to spend the day. Œdema of the face and dyspnœa came on suddenly while the patient was on the way down to Exchange Street Station. When in the train the dyspnœa became rapidly worse and a free hæmoptysis occurred; the blood expectorated was in clots, and amounted to several ounces. She thought she was dying. The only other occupant of the carriage was a lady, who also came to the conclusion that death was imminent, and was so much disturbed that at the first stop she sought another compartment, leaving the sufferer to fend for herself. The dyspnœa and hæmoptysis persisted throughout the day, and in the evening, after returning home, she was still expectorating clots of blood. By this time the eyes were almost closed by the œdema of the lids.

On examining the chest, there was dulness over the left lower lobe, the breath sounds were deficient, and there were numerous medium-sized râles, indicating that the hæmorrhage originated in this area of the lung. This attack was more

severe than any she has experienced, and necessitated her staying in bed for a week; the hæmoptysis slowly diminished, and the chest became normal, with the exception of a few bronchitic sounds. The sputum has been examined more than once, rather as a matter of form than anything else, but no tubercle bacilli have ever been demonstrated.

Hæmaturia first occurred about the same date as the hæmoptysis, and at first used to recur every few months; as with the bleeding from the lungs, bleeding from the kidneys was always synchronous with the appearance of circumscribed œdema of the face or limbs. Previous to the last attack, which occurred a few weeks ago, there had been no sign of hæmaturia for four years. This last attack persisted for some days; the urine appeared red, and the blood was obvious to the naked eye. There are still a few blood cells in the centrifugised urine, but no casts.

The repeated hæmoptysis and hæmaturia show that there must have been in this patient a recurrent liability not only to the transudation of plasma but also of blood. This latter is most unusual, and was not noted in any of the cases described by Osler, Milton, Mendel, Halsted, and others.

It is very generally agreed, however, that there is a close relationship between Henoch's purpura and these cases of Quincke's œdema; now in Henoch's purpura the recurrent permeability of the vessels to blood is a recognised feature. In the cases described by him, among other characteristics, intestinal hæmorrhage was the rule, and hæmaturia complicating acute nephritis was occasionally met with.

This case, in its liability to hæmoptysis and hæmaturia, may therefore be considered to stand as a clinical link between Quincke's œdema and Henoch's purpura.

The treatment has consisted in strict regulation of the diet and habits, and the exhibition of the carbonates of magnesium and bismuth, together with the bicarbonate of soda, all in large doses. In addition, for the last three years she has taken calcium salts at intervals. She has learnt by now that disobedience is nearly always followed by another outbreak of œdema, and there is no question that the liability to the attacks and their severity is much lessened.

CASE II.—Male, æt. 32. Recurrent hæmoptysis occurring in patient with apparently sound lungs. There is no history of any serious illness until seven years ago, when he suffered from acute lobar pneumonia affecting the right side of the chest, after which he expectorated a quantity of pus.

For the last six years, with the exception of recurring attacks of hæmoptysis, he has been in excellent health. No history of syphilitic infection or alcoholism can be obtained. His weight has not varied and there have been neither night sweats nor pyrexia. Tubercle bacilli were not found in the sputum. The heart is normal in every respect.

The attacks of bleeding were usually of a few days' duration, when he would spit up from one to one and a half pints of red, slightly frothy sputum, containing clots. Between these attacks of hæmoptysis there was neither cough nor expectoration.

At first the hæmoptysis occurred every three or six months, but for the last two years they have been much more frequent. On January 12th he was examined by a colleague at the Royal Infirmary in order to discover the meaning of these recurrent bleedings, who reported that he could find no evidence of disease in the chest, and passed him on to the X-ray department. Dr. Holland's verdict was, "absolutely nothing abnormal to be

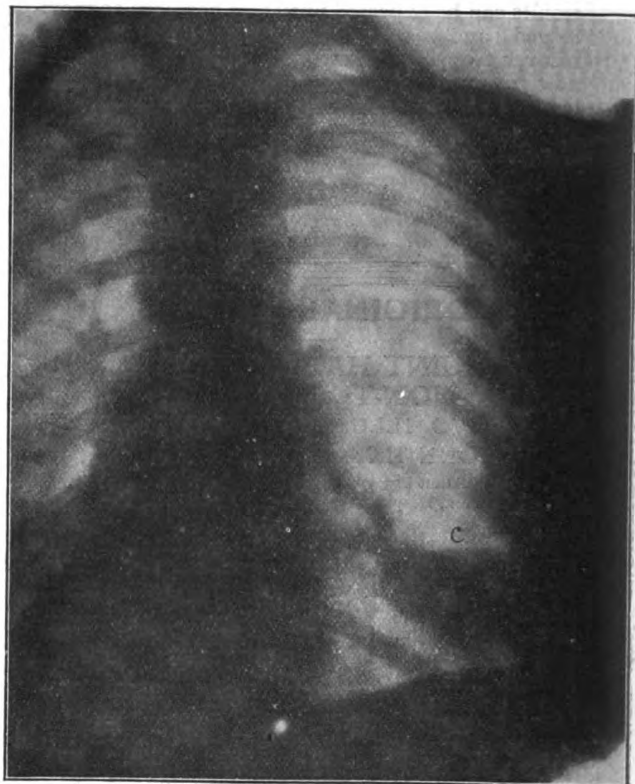


FIG. 1.

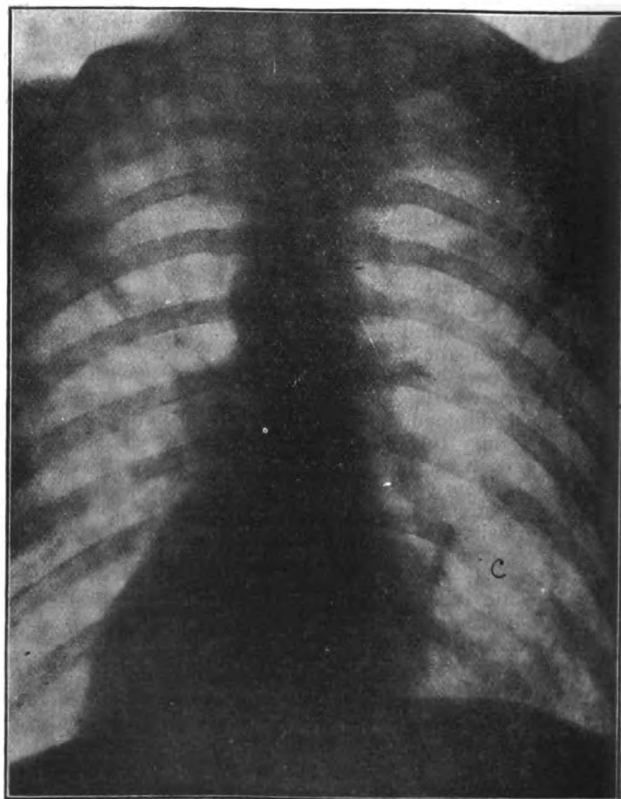


FIG. 2.

made out with lungs or heart or vessels, etc., in any position, no evidence of heart enlargement or alteration in shape." He was then transferred to Dr. Hunt, in the throat department, who reported that there was no lesion in the throat or nose which would account for the hæmoptysis. On the following day I also examined him, and was unable to find anything abnormal with the chest.

On January 29th he was suddenly attacked again by hæmoptysis, and every three minutes or so he expectorated red frothy blood unmixed with pus. The physical signs in the chest were now marked and unmistakable. There was comparative dullness over the whole of the right lower lobe from apex to base, limited anteriorly by the great fissure. The dullness was most pronounced towards the base. The breath sounds were feeble over the dull area; the vocal fremitus and vocal resonance were diminished, and numerous medium-sized crackling *râles* were plainly audible over the 8th, 9th, and 10th spaces. The rest of the chest was normal. He was admitted to Dr. Bradshaw's wards in the Royal Infirmary, who kindly put a bed at my disposal. While in the Infirmary the sputum altered in character and became purulent, and simultaneously the temperature rose to 102.6° F. The pyrexia persisted for a week and then subsided; since when the temperature has been normal.

During and after this period of pyrexia the cough was paroxysmal, and on several occasions the strain of coughing started a fresh attack of bleeding. It was also observed that bending forward and leaning the head over the left edge of the bed was immediately followed by cough and the free expectoration of pus and blood. This combination of physical signs pointed definitely to the presence of a cavity in the lower lobe, and to the probability of the hæmorrhage having originated there, and having caused some blocking of the main bronchi of that lobe. While under observation, the dullness slowly cleared up and the breath sounds became more audible, but at no time were the classical signs of cavity ever distinguished. Before his discharge on April 8th the cough and expectoration had practically ceased, although there was still some impaired resonance at the base.

Perhaps one of the most interesting points about this case is the result of the various examinations by the X-rays. The first revealed nothing, but the second, on February 24th, during the persistence of the hæmoptysis, and previous to the incidence of pyrexia, was most illuminating. The photograph shown in Fig. 1 was taken on that date. There, it is obvious that in the centre of the right lower lobe there is a cavity *c*, half filled with blood; the horizontal surface of the fluid is easily seen dividing the cavity into two parts, the upper half clear and bounded by a thin dark line, the lower half full of dark opaque blood. Passing from this shadow, there is another running up to the root of the right lung.

The second photograph, Fig. 2, was obtained after the cessation of the expectoration, and just before the patient's discharge. It is clear that the lower part of the lung is still not quite normal, but the cavity *c*, which in Fig. 1 can be seen half full of blood, is here well defined and obviously empty. Judging from the clearness of the spaces above the cavity, it is probable that there is some compensatory emphysema in the parenchyma of the lung surrounding it. There is obviously no thickening of the pleura, and any fibrosis which is present is seen towards the root of the lung and around the cavity.

He was examined again by Dr. Holland on April 28th, when the lower lobe was found to be clearer towards its extreme base. Stereoscopic

X-ray photographs have been taken which clearly demonstrate that the cavity is nearer the posterior than the anterior wall of the chest, and is placed posteriorly to the bronchus running down from the root of the lung.

It is remarkable that on examining the chest by palpation, percussion, and auscultation no physical signs indicating the presence of this cavity can be made out. Apart from the evidence afforded by the X-rays, on examining the chest there is nothing to suggest that within an inch or two of the chest wall there is a dry chamber communicating with a bronchus.

I take it that, as a complication or sequel to the acute pneumonia, an abscess formed in the right lower lobe; this discharged through the bronchus, and eventually became a medium-sized dry cavity, which, as it tended to contract, became surrounded by emphysematous lung.

The two main risks incurred by such a patient are both exemplified in this case. Hæmoptysis and sepsis are the two besetting dangers; the former has recurred for the last six years, the latter only after the patient's admission to hospital, where the cavity which was then containing blood must have become infected.

The hæmorrhage was sufficiently free to block the main bronchus to the right lower lobe, and thus caused some collapse of the lung and the physical signs already noted as present over the whole area of that lobe.

The entire absence of physical signs over the right lower lobe previous to the occurrence of the last hæmoptysis is one of the most interesting features of the case, and it brings to my mind a somewhat similar case published by S. West,—“a man of 44, who had been in good health and active work until fourteen days before admission to hospital” when, “after running some distance, he was seized with hæmoptysis, which since that time recurred on the slightest exertion.”

At the autopsy both the lungs were emphysematous, and in other respects healthy, except that in the left, in the upper part of the lower lobe, two small old cavities with fibroid walls were found, and in one of these a ruptured aneurysm the size of a cherry. “This case is important as showing how very limited the disease may be, and how difficult and perhaps impossible it may be to diagnose it.”

The value of the X-rays in obscure cases of hæmoptysis is obvious, and I believe it is important, as in this case, to obtain the X-ray picture during the attack of the hæmoptysis; the cavity containing the blood will then show up clearly on the screen, whereas the cavity might easily be missed if small and empty, and more especially if its walls are not dense and fibrous.

Not much can be done in the way of treatment. The patient should be warned against indulging in any sudden or undue physical strain; severe coughing should be especially avoided. The bowels must be kept freely opened with salines, and small doses of opium may be given; by these means the blood pressure can be kept under control. If the hæmorrhage is at all serious, amyl nitrite should be inhaled, and the blood thus drained away from the bleeding area. It is customary at present to administer calcium salts under these conditions, and this was done in my case. It appears to have been satisfactorily proved, however, by Addis, that the exhibition of large doses of calcium chloride has no effect on the coagulability of the blood, though he does admit that the calcium content of the blood can be influenced by such medication.

It is possible that in this patient the septic invasion of the cavity may prove to have been a

bleeding in disguise, and tend toward thrombosis of the vessel, from which the blood has been finding its way into the cavity. We can at least hope that such will be the case. Time will show whether such hopes are justified.

## THE NATURAL HISTORY OF THE COMMON FLEA, AND ITS CONNECTION WITH COMMUNI- CABLE DISEASES.

By G. MILLIAN, M.D.,

Physician to the Paris Hospitals.

ANIMAL parasites are becoming a more and more important factor in the ætiology of communicable diseases and their recognition as such gives them special and increasing interest to the physician. It therefore behoves medical men to become cognisant of their habits and we may commence with the flea, this frequent, nay oftentimes inseparable, companion of human beings, against which it is extremely difficult to protect ourselves. This parasite transfers its attentions from one person to the other with disconcerting agility, so that though we may be able to steer clear of the louse we fall an easy prey to the flea. I propose, therefore, to discuss its habits and mode of life so that you may be the better able to cope with it.

The biology of the flea has been exhaustively investigated by Drs. Bannerman and Kapadia, and their results are published in the fourth volume of the Plague Commission Report. According to these observers the flea, an apterous or jumping insect, with the body flattened transversely. It undergoes several complete metamorphoses, that is to say, it lays eggs which give issue to a larva, this larva surrounds itself with a cocoon whence by and by the fully-developed insect finds its way. This is a fact not generally known.

It lays its eggs at all times of the year, varying in number from one to five, spherical or ovoid in shape, of a pearly-grey colour. These are deposited, not, as with lice, on the body or garments of the host but in the interstices of the floor or carpet.

The egg gives issue to a worm-like larva provided with organs of mastication. It feeds on vegetable or animal detritus and inhabits sand or dust. The larva is quite small, whitish in colour, and not easily to be distinguished from the various other larvæ that are met with in the floors of dwellings.

In about a week the larva reaches its full size. It then becomes lazy, ceases to eat, and weaves for itself a cocoon of fine white silk.

The fully-developed insect comes out of the cocoon in from seven to fourteen days, having accomplished its evolution in about three weeks.

The young flea can do without food for a week or two so that it lies in wait for a favourable opportunity of obtaining a supply of blood.

The average duration of the life of a flea is—on the rat 41 days, on the guinea pig 20 days and on man 27 days.

Much moisture is inimical to the development of the flea and the same may be said of the other extreme of dryness.

Fleas reproduce their species all the year round but with less zeal in the month of June. A temperature above 90 deg. F., hinders flea reproduction and delays the development of the larva.

There are many varieties of flea: *pulex irritans*, the human flea; *pulex canis* and *pulex felis* appertaining to the dog and cat respectively. *Typhlopsylla musculi* is the ordinary rat flea, but this animal harbours many other kinds as well.

Although theoretically each species lives on its particular animal, which is considered to be its normal host, we find in practice that the same species may, according to circumstances, frequent many different animals.

*Pulex irritans*, for instance, which is almost exclusively met with in man, does not disdain the guinea pig and the rat; *pulex felis* prefers the dog or the cat to man; *pulex cheopis* affects the guinea pig almost as much as the rat, its normal host.

It will not attack man if there be a rat in the neighbourhood, but although it prefers the rat it eagerly turns to man or any other animal if short of food.

The fact that certain human and animal fleas may, under certain circumstances, inhabit the rat, justified the assumption that *vice versa* they may pass from the rat to man. This at any rate is the case with the Kirgus (nomad tribes in Siberia which are very subject to plague). They live crowded together in filthy, miserable huts, the soil of which teems with human, and especially dog fleas.

These biological data are of the greatest interest from a medical point of view more particularly in regard to the dissemination of plague. Verbitski demonstrated that fleas captured on rats dead or dying of plague contained the plague microbe in a virulent state. The same is the case with respect to human and animal fleas that have fed on a moribund plague patient.

The excreta of infected fleas also contain the microbe. It may be recognised either directly under the microscope or by cultivation on agar. Inoculation of these dejecta in the rat gives the plague just as does the inoculation of the cultures. The flea retains the virulent microbe in its intestine for five days when fed on healthy animals. It suffers no inconvenience from the presence of the bacillus although flies similarly infected die. It can live for a long time on a plague-stricken person.

The plague bacillus evidently multiplies in the flea's intestine since the number goes on increasing up to the fifth day.

When the plague-stricken rat dies the fleas quit the body, and it is then that they are most dangerous. This has been shown by actual experiment. If a rat dying of plague be placed in a cage along with a healthy rat, the two being separated by a partial wire gauze screen, as soon as the sick rat dies the fleas are seen to make their way on to the healthy rat which promptly develops the disease.

The flea can only transmit the virus during the first two or three days after its own infection by the plague-sick rat.

Verbitski has shown by numerous experiments that it takes at least five infected fleas to give plague to a healthy animal.

It remained to ascertain how the flea gets rid of the plague bacillus in view of the fact that after a few days a flea that has ingested plague bacilli if brought into contact with a healthy animal, does not impart the disease since it no longer contains the bacillus. This point has been cleared up by Bannerman and Kapadia.

The disappearance of the bacillus from the flea is hastened by a high temperature for it can no longer be detected in the dejections after a week when the fleas are kept at a temperature above 90 deg. F., whereas it is still present at the end of three weeks at a temperature of 77-80 deg. F. In all probability the disappearance of the bacillus from the flea is due to a process of phagocytosis by leucocytes, introduced in the fresh blood, for the



bacillus multiplies more freely if it fasts after sucking infected blood than when subsequently fed on healthy blood.

## QUACKS FALSE REMEDIES AND THE PUBLIC HEALTH.

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### No. I.

RACE deterioration is one of the great problems that face the British statesman of to-day. It is the outcome of many influences that steadily sap the mental, moral, and bodily sanity of the nation. The present purpose is to discuss the matter from a single point of view, namely, the influence of secret remedies upon the health of the community, with an inquiry into the state of the present law as regards this particular trade, and suggestions as to future control of secret remedies in the interests of the public.

#### THE EXISTENCE OF THE EVIL.

In the following pages there will be no formal attempt to define the existence and extent of the damage resulting from the use of patent and proprietary medicines. The evil is notorious and has been exposed for generations past in the medical journals and elsewhere. Our mediæval forefathers were alive to the injury inflicted by it upon the public weal. In the reign of Henry VIII. scientific medicine received its first formal recognition in the shape of a charter to the Royal College of Physicians of London. That body, in return for the many privileges conferred upon it, was entrusted with absolute control of false medicines and false practice, with summary powers in London and seven miles round, which have never been repealed, for the committal to prison of offenders (in modern verbiage, "quacks" and nostrum vendors), and to seize and destroy their wares. The College has failed in its duty, but the powers remain and can be readily revived by Parliament. This point will be referred to later under "recommendations," and elsewhere.

The trade which was thus vigorously legislated against in the time of Henry VIII. has grown to an enormous size in the present day. Huge fortunes are amassed at the expense of the community by the sale of so-called remedies which are some of them inert, some of them potent, some deadly, but most of them fraudulent, inasmuch as they profess not only to cure a host of symptomatic maladies that could not possibly be thus affected by a single remedy, but also to cure the incurable. To take an instance, a nostrum is advertised to "cure" locomotor ataxy, a disease due to certain structural changes in the spinal cord. No cure for this complaint is known to medical science, and any such remedy is barely conceivable in our present state of medical knowledge. Were such a nostrum capable of curing locomotor ataxy it would be hailed with instant acclamation by the medical profession, however doubtfully they might regard it at first. Or turn to the ointment advertised to cure cancer and all surgical diseases, and shown by the British Medical analysis to consist of coloured lard! (a) Accordingly, when either vendor advertises his nostrum as being able to cure the complaint in question he is stating what is not true, and the money that he obtains for his nostrum is obtained from the public under false pretences. Now, the State has, since the earliest times, regarded that particular offence as punishable, so that under an active police system the vendor should come within the purview of the law on that score alone. But the State has further decreed since the days of Henry VIII. that the community should be protected against such false medical practice and false drugs. That position has been ratified by Parliament again and again up to the present day, but nevertheless the traders in such nostrums are able to carry on business in remedies of a transparently false, lying and injurious nature on a scale that is simply stupendous. This is owing to the laxity of the State, of the police, of the

Home Secretary, and of the General Medical Council; to the loose wording of Acts of Parliament; and to the neglect of their statutory duties by the Royal College of Physicians of London. Last, but not least, comes the agency of the newspapers and journals that share in the profits of this nefarious traffic, and hence are accessories in the offence of obtaining money under false pretences. As already stated, it is not intended to enter into a detailed examination of the extent of the evil, but illustrations will be found scattered through the following pages. Meanwhile, anyone who scans the reports of inquests, or who asks any observant medical man in a poor district for his views, or who consults the medical journals, will find no lack of evidence, grim, tragic, and ghastly as to the evils wrought by the greed of capitalist nostrum vendors upon the credulous victim who buys these worthless and often deadly wares.

Germany, which appears to have made up its mind to scotch the evil, has taken the logical step of correct definition. (a) The Australian Royal Commission Report (see below) says:—

"1,334. Definition of the term 'Secret Remedies.'

"The High Courts of Judicature of the Several States of the German Confederation have defined in extraordinarily numerous decisions the term 'Geheimmittel' ('Secret Remedies'). The most far-reaching definition out of these various judgments runs as follows:—

"A secret remedy is a medicament in the (a) shape of medicine to be introduced into the body of (b) man or beast, and intended for the (c) prevention, amelioration, or removal of (d) diseases, bodily injuries, or maladies of any kind whose (e) nature, preparation, and composition are not at the (f) latest made known at the time of the advertisement (g), completely to the ordinary understanding (f), qualitatively and quantitatively."

"These seven concepts (a, b, c, d, e, f, g) are thus characterised in detail and at great length by numerous distinct decisions cited from the Superior Courts of Justice in the States, everything showing a determination to construct an impregnable position of public defence."

The Germans, it may be noted, are solicitous that men as well as beasts should be protected from the evil consequences arising from the sale of secret drugs. In the United Kingdom the solicitude appears to be on the side of the cattle. The British legislature have enacted that (Fertilisers and Feeding Stuffs Act, 1893) all packages over 56 lbs. weight must give to the purchaser a legal warranty stating the composition of the article (whether fertiliser or feeding stuff). Yet the same authority neglects to protect the King's subjects, young or old, from the secret sale of drugs that, in the opinion of the medical profession, as expressed in their special journals, not to mention various competent lay authorities, are in most cases worthless, deadly, and more or less fraudulent.

The term "secret remedy" includes any drug or mixture of drugs of which the nature is kept secret by the proprietor, but which is sold to the public for the cure of one or more maladies. This definition covers all proprietary medicines the nature of which is not published. In this way certain proprietary medicines, such as chlorodyne, aspirin, eucaine, and other valuable remedies, recognised and largely used by the medical profession, are included. In the case of such remedies in the hands of respectable firms there would probably be little hardship in asking them to attach the formula of composition to their wares. In the medical world there is a sale for specially pure preparations of quite ordinary drugs, such as oxide of zinc, preparations of bismuth or opium, and charcoal. They are advertised as drugs pure and simple, and do not claim to be potent cures for this or that malady, and there is no apparent reason why the proprietor of recognised proprietary remedies should object to a similar amount of publicity. If the known simple drug finds a remunerative sale, why not the proprietary drug or mixture of drugs which reveals its composition? As a

(a) Report of the Royal Commission on Secret Drugs, Cures, and Foods to the Commonwealth of Australia. Vol. 1. 1907. p. 385.

(a) "Secret Remedies," p. 180.



matter of fact, in the case of aspirin and many most valuable drugs, the chemical composition is published in trade circulars and medical books, and often on the labels of the containing packages.

The best evidence yet collected, however, is Volume I. of the Report of the Royal Commission on Secret Drugs, Cures, and Foods, presented to the Parliament of the Commonwealth of Australia. The able and energetic Commissioner, Mr. Octavius Charles Beale, has collected an invaluable mass of facts regarding the trade in secret remedies, its effects, and its relation to legislation, with recommendations as to its control. This Report is likely to remain for some time the classical work of reference on the subject with which it deals. No candid person could even glance casually through its pages and fail to be convinced of the reality and the gravity of the evils attached to the secret medicine traffic in Australia. Quackery, however, is cosmopolitan and universal, and the Report shows that Australia is flooded with quack remedies sent from the United Kingdom, from America, and from other countries. The composition of these world-wide nostrums, their extravagant and fraudulent claims, their grossly extortionate cost, their catchpenny advertisements, are one and the same whatever the country in which they are sold. The steel and pennyroyal pills, sent out from a Midland town of England, are sold to credulous women at a high price in Melbourne and all over the world, for suggested purposes that it is impossible they could fulfil. Worse still, other pills, containing most deadly drugs (as shown by analysis) are sold in a similar fashion without anything on the wrapper to intimate that a dangerous drug is contained therein. Not all the British colonies, however, are foolish enough to permit their citizens to be deprived of their health and robbed of their money for the behoof of the patent medicine trader.

On November 28th, 1907, on the recommendation of Dr. Langley Browne, seconded by Dr. McManus, the General Medical Council resolved "that a committee be appointed to ascertain what legal precedents exist in the Colonies and Dependencies of the Empire and in foreign countries for the prevention of medical practice by other than legally qualified persons, and to consider what steps should be taken to procure effective legislation for the same purpose in the United Kingdom of Great Britain and Ireland." This view of the Committee as to the advisability of a Royal Commission were adopted by the Council and presented to the Lord President, Privy Council.

Any legislative action which controls irregular medical practice must surely control vendors of secret remedies who profess to cure disease thereby. These medically ignorant and unqualified persons treat cases without examination, sometimes by correspondence and by answers to printed questions. Neither the vendor nor the purchaser of secret remedies troubles his head about diagnosis, which, needless to say, can be determined only after personal examination by a skilled medical man. The pith of the matter is that the unqualified vendor is paid for the wares which he sells for the avowed purpose of curing human maladies. That being so, the investigation of secret remedies must necessarily become a part of the labours of any Royal Commission appointed to inquire into the conditions of medical practice by unqualified persons. If these views be accepted the recent action of the General Medical Council becomes of real importance in relation to secret remedies.

The report of the Unqualified Practice Prevention Committee of the General Medical Council (a) shows that:

Seventy-five British Colonies and Dependencies and foreign countries forbid the practice of medicine by unqualified persons, under penalty of fine and imprisonment, or both. It is not a little curious that unqualified practice should be sternly repressed in many Colonies and Dependencies, to mention a few, in New Brunswick, Ceylon, Mauritius, Western Australia, Cape Colony, while it is uncontrolled at home. It is controlled by the State in Austria, France, Belgium, Italy,

Greece, Switzerland, and many other countries, including some which are usually regarded as having dropped more or less behind in the world's progress, such as Spain, Portugal, Turkey, Chili, Panama, Montenegro, Nicaragua, and other Central American States. In the small island of San Domingo there is a penalty for practicing without registration, though otherwise qualified, a fact that offers a standing reproach to the British Empire, which has not adopted the obvious precaution of compulsory registration of medical men. In the desert Falkland Islands anyone wrongfully using a medical title is subject to fine and imprisonment. That is to say, a charlatan like Bridgwater, whose case will be referred to later in detail, is allowed to call himself M.D., U.S.A. (a title that does not exist) and to practise unrestrainedly in various parts of Great Britain; whereas he would have found short shrift in the small and remote Falkland Islands. The Report, in dealing with Great Britain and the existing legal provisions for the prevention of unqualified practice, fails to mention the unrepealed powers of the Royal College of Physicians of London over quacks and quackery in the metropolis, conferred by charter of Henry VIII. and confirmed by subsequent Acts up to the Medical Act of 1858, and the Medical Amendment Act of 1860.

Another valuable mine of facts is to be found in the little volume, "Secret Remedies: What they Cost and What they Contain," published by the British Medical Association. It reproduces a series of articles based upon the analysis of a long list of proprietary articles, and appends to each an estimate of bare cost—that is to say, of the remedies apart from package, wrapper, labels, and so on. The disproportionate profits thus disclosed may be illustrated by a few examples taken at random. Thus the first one given is that of a catarrh cure, sold at a shilling, against an estimated cost of one-thirtieth of a farthing. Of a cure for consumption sold by an American company, with a London agency, at a price of £2 10s. for a month's treatment, it is stated that the approximate cost of the two bottles that are supplied amounts together to 2½d. A notorious blood mixture, sold at 2s. 9d. a bottle, contained ingredients valued at 1½d. A rheumatic cure consisted of 50 tablets, costing 8d., and sold at 4s. 6d., and of 40 pills valued at ½d., and sold at 1s. 1½d. An enormously advertised ointment, the claims of which have been scathingly condemned by a British judge, sold at 1s. 1½d. a box, the contents of which are valued at ½d. An internal preparation for making the hair grow, sold at 2s. 6d., was found on analysis to contain ingredients valued at 1d.

The question of the prime cost of the merchandise, however, and of the profits accruing therefrom, is quite a minor matter. The cost of the raw material not infrequently bears a small proportion to the ultimate selling price when a finished article has gone through the various stages of production and distribution. The objections to the trade in secret remedies are based on other and more serious issues, as, for instance, the non-recognition of disease by the drug taker, especially in the earliest stages of cancer, consumption, and infectious diseases. What is easier for an uneducated person than to take some pain-killer to relieve the pain of an unrecognised cancer, instead of going to a medical man, who would recognise the disease at once and send the patient to a surgeon? Indigestion is often an early symptom of consumption, and many a consumptive patient has thrown away all chance of recovery by taking some of the much advertised and worthless cures for dyspepsia. Ulcer of the stomach, cancer of liver, stomach and bowel, appendicitis, and other serious internal complaints give rise to abdominal pain and discomfort, and are in nine cases out of ten ascribed by sufferers to "indigestion."

The facts furnished by the British Medical Association are of extreme value, inasmuch as they furnish evidence founded on the findings of analytical chemistry that cannot be disputed. They supply a basis, therefore, for testing the claims of the remedies thus analysed by the unfailing light of chemical science. In that way alone it is in many cases possible to show that the vendor is selling his wares on the strength of impossible claims. For

(a) Minutes of the General Medical Council. Vol. XLV. 1908. P. 429.

example, Warner's Safe Cure is sold "for kidney and liver and Bright's disease and jaundice" (label). It was found to contain (a):—

Potassium nitrate, 50 gr.  
Oil of gaultheria,  $\frac{1}{2}$  minim.  
Rectified spirit, 5 fluid drachms.  
Liq. ext. of taraxacum, 10 fluid drachms.  
Glycerine, 4 fluid drachms.  
Water, 8 fluid ounces.

From a medical point of view it may be asserted that the above mixture could not by any possibility cure Bright's disease, while the 10 per cent. of alcohol (approximately) contained therein would be absolutely injurious. Any person affected with chronic kidney disease who bought that medicine would therefore be purchasing not only a worthless but an injurious remedy. The Australian Royal Commission (\$685) (b) gives the following formula for the same nostrum:—"Warner's Safe Kidney and Liver Cure (on sale in Australia).—In Germany each maker of patent medicines must furnish the Government with the formula for the patent he makes. This is the one furnished by Warner for 'Safe Kidney and Liver Cure.' Each bottle contains:—Ext. lycopodium virginicum, 308 gr.; ext. hepatica (herb), 322 gr.; ext. gaultheria,  $7\frac{1}{2}$  gr.; potassium nitrate, 39 gr.; alcohol, 90 per cent.,  $2\frac{1}{2}$  oz.; glycerin, 10 dr.; water sufficient to make one pint.—*Formulary Druggists' Magazine*."

From this it is evident that there is not necessarily any fixed composition in a secret remedy. Clearly it can be varied from time to time in order to suit the pocket, the whim, or the convenience of the proprietor. A suggestive statement in connection with the alcohol admittedly contained in Warner's Safe Cure is that published in the Commonwealth Report (\$888), which says:—"Warner's Safe Cure, together with all the Warner remedies, is based, managed, and controlled by the New York and Kentucky Distilling Company, manufacturers of standard whiskeys which do not pretend to remedy anything but thirst."

The Australian Report gives an illustration of "some familiar Proprietary Drugs, and how they are regarded in Germany." These are taken from an official collection of the public warnings at the Local Health Office, 1905, under the title "Against Quackery and the Secret Remedy Swindle." Warner's Safe Cure is dealt with in the following sledge-hammer style (c):—

#### "WARNER'S SAFE CURE.

"102. By the circulation of a blatant prospectus, which is thrown into railway carriages for the travelling public, a certain firm—H. H. Warner and Co., in Frankfort-on-Main—advertises an alleged wonder-working remedy with the name of 'Warner's Safe Cure.' This is vaunted as a sure remedy for all diseases of the kidneys, liver, and urinary organs, jaundice, biliary fever, weakness, inability, heart disease, melancholia, malaria, backache, gout, rheumatism, convulsions, gravel, dropsy, Bright's disease, uterine disease, and the change of life. It consists of an infusion of liverwort leaves, aromatised with wintergreen oil, and contains nitre, glycerine, and alcohol in slight concentration, and relatively small quantities. Simultaneously with this remedy some sugar-coated aloes pills are to be used.

"These remedies have not the beneficial effects ascribed to them in the pamphlet, which is provided with several illustrations, and we must point out that there is not a single remedy for the ailments collected in the list, where they, moreover, bear absurd titles.

"Warner's Safe Cure is prepared by two representatives of the business of Warner and Co. in Rochester, namely, William R. Kennart and Anton C. Wehmar, in Frankfort-on-Main, and is pushed, in the drug stores and privately, in an elegant packing, which, in a characteristic way, shows repeatedly a safe as trademark. The price is far above the actual value. We warn you against buying this useless medicine."

When will British officialism denounce these and kindred remedies in similar fearless fashion?

From the variability of composition of secret medi-

cines it follows that any given analysis, although true of the particular sample upon which it was conducted, may not apply with exactitude to a further sample. After an exposure in public it is easy enough for a proprietor to alter his formula, so that he is enabled, when confronted with a published analysis in court, to deny on oath its accuracy as applied to the particular remedy he is selling at the time.

Among other works that should be consulted are Dr. S. Squire Sprigge's "Medicine and the Public," which has an excellent chapter (VI.) on "The Evils of Quackery," from which the following passage is quoted (a):—

"The licence enjoyed by irregular practitioners of medicine—by persons, that is, who possess in the legal sense of the word no licence whatever to practice—is absolutely wonderful. It would be ludicrous if it were not sad; medical electricians, medical hypnotists, medical botanists, and medical masseurs, on the one hand, and the votaries of 'safe' medicine, bone-setters, and the proprietors of patent remedies on the other—all are ready to treat the community for every sort of pathological condition, and all claim to be the depositaries of therapeutic secrets which have been denied to the intelligence of men who have made medicine and surgery the study of their lives, and who have stood the test of examination of their knowledge. Surely but very little thought bestowed upon this situation should enable the dullest to see that it is a highly ridiculous one, and one that reflects in no creditable manner upon public astuteness and good sense. Yet the ignorant and the product of the highest culture will alike seek the administrations of the quack, and of the two the latter appears sometimes to fall the easier victim."

Another useful book of reference is "Patent Foods and Patent Medicines," by Dr. Robert Hutchison. The "Australian Report" quotes largely from the work of Dr. William Murrell, Physician and Lecturer to the Westminster Hospital, who was one of the first to investigate the composition of patent medicines, and has given a long list of supposed active ingredients of popular "patent medicines," which will be found in his well-known book, "What to do in cases of poisoning."

(b) The presence of such a list in a practical guide to the treatment of poisoning cases needs no further comment.

Some valuable information is also to be found in a (c) report upon Patent Medicines and Headache Powders furnished by Mr. Thomas Macfarlane, Chief Analyst of the Laboratory of the Inland Revenue Department, Ottawa, Canada, to the head of that Department.

#### SECRET DRUGS.

No age and no class of disease are uncatered for by the quack and the quack medicine vendor. Perhaps the readiest plan of furnishing readers with a general idea of the nature and extent of a few of their trade will be to give an outline sketch of their wares under various headings, together with a running comment and any other details that may be necessary for the sake of clearness. As so much good work has been already done in this direction, this part of the subject will be dealt with in a brief and condensed manner.

#### CHILDREN'S "SOOTHING" MEDICINES.

The practice of dosing children with teething, soothing, and cooling powders or syrups, baby's friend, and so on, is extremely common. The main drugs contained in preparations of this kind are opium and its derivatives, and calomel, both of them deadly drugs when given to infants. Thus death has been known to follow the administration of one drop of laudanum to a child 7 days old (Taylor). Some of the soothing medicines sold for children contain morphia, which is obviously more dangerous than laudanum. Other dangerous drugs, such as acetanilide, sometimes enter into these patent medicines for infants. No medical man would dream of giving acetanilide to children, nor would he give opium or its preparations except upon

(a) "Secret Remedies." Brit. Med. Assoc., London, 1909, p. 73.

(b) "Report on Secret Drugs, Cures, and Foods," Government of the Commonwealth of Australia. Vol. I, p. 185.

(c) "Australian Report," Vol. I., §688, p. 187.

(a) "Medicine and the Public." Dr. S. Squire Sprigge. (London: Heinemann, 1905). P. 68.

(b) *Op. cit.* Tenth Edition. London. Pp. 21-25.

(c) Australian Report, Part I, pp. 102, et seq.

healed spontaneously. No decided conclusion could be drawn as to the character and further course of the affection from the quantity of tuberculin required to set up a manifest reaction when tuberculous disease was present at the time of inoculation. When the tuberculin was given subcutaneously a dose of 3 mg. was frequently necessary to set up evidence of a latent tuberculous disease.

The same paper contains an account of  
**THE TREATMENT OF TUBERCULOUS GROWTHS AND  
ULCERS OF THE NASAL SEPTUM,**

by Dr. Beese, Rostock. These affections are, he says, mostly localised in the cartilaginous part of the septum. They are frequently the only spot in the body in which tuberculous disease is present, and especially when the infection is brought about by picking the nose. The former usual and almost exclusive treatment of the disease by scraping and caustics is frequently ineffective, as experience shows that relapses are frequent after this anything but radical form of treatment.

It is much more proper to excise the whole of the diseased portion of the septum. Even then perforation of the septum often takes place in the end. Examination of the excised portion has shown why scraping and caustics are generally ineffectual; one frequently finds the cartilage already recrossed, and the tuberculous affection already pushed forward through to the other side, even when this is to all appearance sound.

Excision is easy to carry out. After the part has been anaesthetised and made bloodless, it is cut through with a narrow-bladed knife. A fine, blunt-pointed knife is then passed through the opening, and the diseased part excised under guidance of the eye. The principal point is not to fail to cut well round, so as not to leave any portion that is diseased behind. The hæmorrhage is only slight, so that tamponade is not necessary. Permanent recovery has followed this line of treatment in the Rostock Klinik in a short time, a fact that is so much the more important in that patients are at the same time freed from the whole of their tuberculosis.

### AUSTRIA.

Vienna, Sept. 26th, 1909.

#### HYPOPHYSIS CEREBRI.

At the Congress, Hochwart raised an interesting discussion in the Section of Neuropathology, on the diagnosis of disease in the hypophysis cerebri. In the first place, he found that acromegalia was not a constant associate with this disease, as he had observed in literature 155 necropsies where the hypophysis was diseased, but no acromegalia was present. His own cases bore out his contention that some difference existed in the nature of the disease present that should be diagnosed. These cases, he affirmed, had not the general psychical disturbance and tendency to sleep, but usually had the hæmianoptic defect, ocular paralysis, temperature anomaly, etc., while radiology confirms the enlargement of the sella turcica. The individual is usually small in person, if not dwarfish. Frequently impotence with consequent amenorrhæa is the result, though in the young there may be found a stunted genital development with a large amount of obesity in the part which assumes the form—degeneratio adiposo-genitals, coined by Fröhlich. The enlargement of the gland assumes every variety of form, but the most common is a compression of the chiasma, as well as the posterior part of the brain.

The duration of this disease varies from a few months to three years. The differential diagnosis is complicated with other diseases at the base of the brain, such as syphilis, tubercle, etc.

#### SCROFULA OR TUBERCLE.

In the section for Pediatrics, Prof. Escherich gave a long history of cause and effect in scrofula and tuberculosis, which might be summed up under a few headings, as follows:—The cause of tuberculosis in children depends very much upon the nature and virulence of the infection, site of entrance, and distribution in the body, as well as the age and constitution of the individual. The scrofulous subject presents a stubborn recurrent catarrh of the skin and mucous

membrane leaving the so-called scrofuloid in the juvenile form, which usually occurs between the first and fourth year. The scrofulous condition commonly arises in a lymphatic constitution. The subject may appear well nourished and over-developed, with fat, associated with a pasty condition of the skin, inclining to be eczematous, with indolent lymphatic swellings and hyperplasia of the lymph apparatus, as well as enlargement of the spleen and thyroid gland. This characteristic constitutional anomaly is the assumed cause, but how to explain the lymphatic constitution and extension is not to be easily demonstrated. One thing we do know—that it is often associated with other diseases, such as rachitis, etc., and that the highly sensitiveness of the integument to the tuberculin toxin convinces us that it is closely allied to that disease. Another proof is that these subjects may be immunised with increased doses of the old tuberculin, rising to 1 ctm. of the A.Y.O. toxin, which speedily reduces this hyper-sensitive condition; at the same time a rapid improvement takes place in the cutaneous surface and catarrh of the mucous membrane, while the bacilli in the glands and the osseous centres are finally affected. The treatment has always been rationally conducted in scrofula with iodide and cod-liver oil, but the recent immunising with the old tuberculin is an adjunct which has added largely to our curative agents in scrofula. Barbier said that tuberculosis in children was one of the greatest scourges we had to fight against. According to statistics, tubercular victims range from 30 to 60 deaths during every first year of 200 children born.

### FROM OUR SPECIAL CORRESPONDENTS AT HOME.

#### GLASGOW.

THE topics chiefly agitating the medical mind are the proposed

UNIVERSITY CHAIRS AT THE ROYAL INFIRMARY, AND  
THE SCHOOL BOARD'S SCHEME FOR THE MEDICAL  
INSPECTION OF SCHOOL CHILDREN.

As regards the latter, the board have passed over the claims of local practitioners, and have appointed a gentleman presently resident in England as chief medical inspector. The new inspector is a graduate of Edinburgh University. Whether this passing over of local men has been due to the, as some think, undignified attitude of the profession in reference to the subsidiary appointments, and their complaints as to the scale of pay for these, no one can say. The subsidiary posts will necessarily be filled by local men, and terms will have to be arranged. A jump from £560 for chief inspector to £40 for part-time assistants is, however, rather a record leap for School Board financiers. Govan School Board have appointed as their chief inspector a local—that is to say, a Glasgow—man.

Under the will of the late Dr. Henry Muirhead, who died some fifteen years ago, a scheme of medical education for women was to be established, which his trustees have never been able to carry out. For years their sole task has been to accumulate interest with principal. Hence they are now joining with St. Mungo's College in endeavouring to arrange with Glasgow University and the Carnegie Trust for the establishment of certain University chairs at the Royal Infirmary to take the place altogether of the present St. Mungo's College. The chairs are to be of four subjects—(1) Medicine, (2) Surgery, (3) Midwifery, and (4) Pathology. The endowment of two of these chairs with an income of £400 each from the Muirhead trust funds will absorb part of the revenue of these funds. Parliamentary powers to do this are to be sought.

It is hoped that by means of these chairs the dwindling classes of St. Mungo's College will be replaced by four well-attended University classes, the students of which will relieve the Western Infirmary from overcrowding, and benefit the Royal by their attendance.

**BELFAST.**

**QUEEN'S COLLEGE, BELFAST.**—PRESIDENT'S ANNUAL REPORT.—This report, which has just appeared, is of special interest at the present moment, when the College enters on its University career. Naturally the changes which are taking place are noted in the report, which thus deals with the future as well as with the past. The College was only endowed to the extent of £7,000 per annum: it will now, as the Queen's University of Belfast, enjoy an income of £28,000 per annum, to which private endowments will be added. Owing to this increased endowment it has already been arranged to add considerably to the teaching staff, and the prizes and scholarships will be increased in number and value by the amount of about £1,000 per annum. In addition to the increased annual endowment, the Treasury has granted a sum of £60,000 for providing necessary buildings, land, and equipment. Part of this will be spent at once in providing extra class-rooms, rooms for the lady students, professors' common-room, etc., and part will be held in reserve to meet any needs that may arise in the next few years, when the University is well started on its career.

Several new Chairs have been established in the Arts and Science Faculties, and in the Faculty of Medicine, though no new chairs are established, a number of appointments have been made. Professor Milroy is the first occupant of the new post of Dean of the Faculty of Medicine, and Demonstrators and Assistants have been appointed in all the more important subjects.

During the Session 1908-9 there were 456 students attending the College, of whom 224 were in the Medical Faculty. Of the 456 students no less than 410 came from the Province of Ulster, 4 from Munster, 12 from Leinster, and 5 from Connaught, while England supplied 11, Scotland 5, and the Colonies most of the remainder.

**LETTERS TO THE EDITOR.**

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

**THE PSYCHIC TREATMENT OF INTEMPERANCE.**

*To the Editor of THE MEDICAL PRESS AND CIRCULAR.*

SIR,—I have read with much interest your report (September 15th) of Dr. Quackenbos's address on the treatment of intemperance, and the comments thereon in the current issue.

"Medical Temperance Reformer" expresses regret that Dr. Quackenbos does not fully describe his method. This omission is probably due to the lecturer taking it for granted that his hearers were acquainted with the ordinary methods of inducing hypnosis. They are fully described in the text-books (a), and can be easily learnt by medical men.

I have been using hypnotic suggestion in the treatment of chronic alcoholism, drug habits, and abnormal nervous conditions for over twenty years, and some hundreds of such patients have passed through my hands. At first, fired by the enthusiasm of my venerated teacher, the late Dr. Liébeault, of Nancy, I expected to cure every drunkard who was brought to me. Experience, alas! has taught me otherwise, but I have had some surprising and brilliant successes, and have never seen any harmful results. I have rarely or never seen other systems succeed where hypnotism, properly applied, has failed. Alcoholics are eminently "suggestible," and the advertised methods of cure—Keely's, Oppenheimer's, etc., work largely on that principle.

To be successful one has to treat both the moral and physical causes underlying the condition, and hypnotism enables us to act on the latter, as well as the former, by suggestion.

In carrying out a system it is desirable to have a

(a) Vide books by Milne Bramwell, Albert Mole, Lloyd Tuckey, Bernheim, etc.

working hypothesis to explain it, and the theory of appealing to "the subconscious mind" of Myers or "the other fellow" within us of Wendell Holmes is the one adopted by Dr. Quackenbos and most hypnotists, it being presumed that this underlying self is better and wiser than the everyday personality.

I find my conclusions closely correspond with those of Professor Forel, the eminent psychologist and ardent temperance reformer of Zurich, who thinks hypnotic suggestion should be employed as an effective aid to cure in a very large proportion of alcoholic cases as a means of strengthening the patient's will, removing the craving, and developing his moral sense.

I am, Sir, yours truly,

CHAS. LLOYD TUCKEY, M.D.

London, W., September 24th, 1909.

**MEDICAL MEMBERS OF PARLIAMENT.**

*To the Editor of THE MEDICAL PRESS AND CIRCULAR.*

SIR,—In the course of your excellent article to-day, September 22nd, on the proposed Patent Medicine Committee, you express a regret "that it was left to a lay member of the House of Commons to call attention to the matter," and at the same time you declare your belief that when the call for action comes, medical members will not fail in their duty. The fact is that it would be difficult to name a single medical member who displays any sign that he holds his position in any respect as a representative of his profession. Nearly all the present medical members are politicians first, doctors afterwards. They are not to be blamed for this. It is, as a rule, impossible for an active medical practitioner of any rank to be a member of Parliament, impossible for him to give up from six to nine months of his year to public work. If the profession wishes to be represented in Parliament under present conditions it must subsidise selected men. It would no doubt be a great advantage if this could be done. The position of the profession in all its relations with the State and the public might be much improved if it had in the House even a single man endowed with the personal, intellectual and statesmanlike qualities that command attention in that assembly, and who would devote himself to the interests of his brethren. Such a man might easily destroy the prejudice which now affects the advocacy of professional interests by members of the profession. He could demonstrate the fact, which is so often dwelt upon in various places in the Medical Press—namely, that the profession seeks and asks nothing from Government which will not bring as great advantage to the people as to themselves. In the meantime, it is very fortunate that the quackery question has been taken up in earnest by an independent lay member, Captain Craig. He cannot, at any rate, be charged with selfish motives. The obligation under which he has placed the profession and the public by the initial steps he has made possible in one direction of medical law reform is already great. We need not doubt that the obligation will, in due course, be largely increased. As the addition of my name would add no weight to these remarks, I beg to be allowed to subscribe myself,

I am, Sir, yours truly,

MEDICAL POLITICIAN.

Birmingham, September 22nd, 1909.

**THE DECLINING BIRTH-RATE.**

*To the Editor of THE MEDICAL PRESS AND CIRCULAR.*

SIR,—Your correspondent, "A Yorkshire Practitioner," is quite right in his main statements. If the birth-rate throughout all the classes were controlled by prudence and directed by science, all would be well, but when due entirely to motives of narrow egoism, a falling birth-rate connotes moral decay and indicates the decline of the race. As I have over and over again pointed out, the question has been fully illustrated in the history of France during the past fifty years. She has lost, and can never regain, her dominant position in Europe, her numbers being now only half those of her mighty German neighbour. At present Germany has at home upwards of 68,000,000,

besides some millions who, although in foreign countries, have not severed their connection with the Fatherland, and she is increasing at the rate of nearly a million a year. France, on the other hand, remains stationary at 39,000,000, and has none abroad save a few thousands, mostly officials, in her vast oversea possessions. The birth-rate in Germany is falling, but, if it continue, it will take more than fifty years before she is in the same stationary position as France. The opinions of scientific Frenchmen are unanimous as to the significance of the facts. I quoted two—M. Bertillon and M. Leroy-Beaulieu—in my last. A minute examination of French social conventions, of French marriage customs, and of the moral qualities of the people, will convince the inquirer of the reality of the decadence of this gifted race, and, unfortunately, the British are now displaying the same symptoms. I cannot on this occasion occupy much more of your space, and I must not reiterate old statements; but I would point out to "A Yorkshire Practitioner" the danger of generalising from a single instance. No doubt it might have been better if his gardener's wife had brought forth a baby (he does not state how many there are) less frequently than every ten months; but it does not at all follow that she would be better without children, or without a fair-sized brood, and rickets is an easily preventable disease, and surely it might easily have been prevented in this case. He will find in all the manufacturing towns in his county vast numbers of mill hands who deliberately limit the number of their offspring, or have none at all, merely because children are no longer "pecuniary assets," being forbidden by the Factory Acts to work and earn wages. These mill-hands, man and wife, earn together two or three times the wages of "A Yorkshire Practitioner's" gardener, and yet rickets prevails to an enormous extent among their children. The mothers decline to suckle them; it prevents them from earning money, and the babies are bred up as rickety wasters, entirely from lack of proper food and feeding. In our own country, as in France, it is among the classes from above downwards, those best able to support and put out in the world the normal number of children, who are shirking the obligations of parenthood and ignoring their duties as citizens of the Empire. It is this unequivocal symptom of moral deterioration which is so disquieting; it is impossible for the most extreme optimist to ignore its sinister significance.

I am, Sir, yours truly,  
A STUDENT OF SOCIOLOGY.

September 24th, 1909.

*To the Editor of THE MEDICAL PRESS AND CIRCULAR.*

SIR,—May I just point out to your correspondents that they are entirely on the wrong scent in attributing the declining birth-rate to selfishness or a craving for luxury and comfort?

The vast majority of this country nowadays, with unearned incomes, in trade or profession, live from hand to mouth. The competition for a livelihood during the last few decades has become greatly intensified, inasmuch that an indefinite number are, as a consequence, driven through actual necessity to limit their progeny. This explains the declining birth-rate, and not what your correspondents suppose.

I am, Sir, yours truly,  
CLEMENT H. SERS, M.R.C.S.

Brighton,

September 24th, 1909.

[Our correspondent, "A Yorkshire Practitioner," raised the question in our last issue that "the decline in the birth-rate is most manifest in countries where riches have increased," and as a fact this is so, as evidence of which we need only instance the United States, France, Germany, and England. In Australia, where, man per man, money is perhaps more evenly distributed than anywhere else, the decline in the birth-rate has become a scandal, being due entirely to selfish motives, and not to the need of economy. Mr. Sers' reply is scarcely in accordance with these facts, although in individual cases his theory is doubtless correct.—Ed.]

## OBITUARY.

HUBERT ELWYN J. BISS, M.A., M.D. Cantab.,  
M.R.C.S., L.R.C.P. Lond., D.P.H. Ed. and Glas.

WITH sincere regret we have to announce the death of Dr. Hubert Biss, at the early age of 37, after a painful illness. The son of a well-known London physician, Dr. C. Y. Biss, he was educated at Dulwich College, and afterwards at Cambridge, where he graduated B.A. in 1892 (2nd class Science Tripos); M.A. in 1896; M.B., B.C., 1896; M.D., 1901. He studied also at Middlesex Hospital and Neuchâtel, and took the M.R.C.S. Eng. and L.R.C.P. Lond. conjoint diploma in 1896; and the D.P.H. Edinburgh and Glasgow in 1899. After graduation he held various posts, among them being that of House Physician to the Brompton Consumption Hospital, and Assistant Demonstrator of Anatomy and Biology in the Cambridge University Laboratory. For some years he was Assistant Medical Officer at the Grove and the Park Fever Hospitals, under the Metropolitan Asylums Board, and it was there that some of his best professional work was undertaken. Dr. Biss acted as resident physician during the last illness of the late Mr. W. E. Gladstone, both at Bournemouth and at Hawarden Castle, and to him fell the melancholy duty of signing the death certificate of the great statesman. In 1903 Dr. Biss married and started practice at Eastbourne, whence he removed in 1906 to London. In the latter place he specialised in medico-legal work, especially as regards the Employers' Liability Act, and he became medical referee to several well-known insurance offices. During the few years that elapsed he was rapidly building up an extensive practice, when the symptoms of a gastric trouble, from which he had suffered for many years, took a serious turn, and he went to a nursing home at Eastbourne, in order to be under Dr. Harper. Hemorrhage set in from a duodenal ulcer, and he passed away on September 20th.

We write this notice with a deep sense of personal loss, as Dr. Biss had been for some years a valuable contributor to our columns, and on his coming to London in 1906 became Assistant Editor to THE MEDICAL PRESS AND CIRCULAR. His brilliant pen and his scholarly genius were ever at the service of the profession to which his life was devoted. His genial manner and sterling character secured him many friends, but by none will his loss be felt more deeply than by those who were brought into close contact with him in his journalistic work.

## SPECIAL ARTICLES.

### THE TYPHOID OUTBREAK AT CLONTARF.

IT will be remembered that in the autumn of last year a serious outbreak of typhoid fever, involving 142 patients, occurred at Clontarf. In the spring of this year the outbreak was the subject of a report by Sir Charles Cameron, Medical Superintendent Officer of Health of Dublin. This report we had occasion to comment on in our issue of 31st March last. We then found ourselves unable to agree in certain of Sir Charles Cameron's conclusions as to the causation of the outbreak, while, of course, accepting his statement of facts.

The outbreak, however, is now the subject of a report by Surgeon-Colonel Edgar Flinn, Medical Inspector for the Local Government Board (a), which presents many points of difference from that by Sir Charles Cameron. These points of difference occur not only in the statements of conclusions, but also in the relation of facts.

The two observers agree that the immediate cause of the outbreak was the infection of a dairy which supplied milk to a great many of the houses in Clontarf. There was no illness among any of the people employed at the dairy or in any of their

(a) "Annual Report of the Local Government Board for Ireland for the year ended March 31st, 1909."

families. The question for solution, therefore, was—How did the dairy become infected?

According to Surgeon-Colonel Flinn, there were five possible solutions of this question:—(1) Were any of the milking staff "typhoid carriers"? (2) Were the emanations from the refuse deposited at the Fairview sloblands responsible? (3) Were the germs of infection spread in the course of the main drainage operation? (4) Was defective drainage the medium of infection? (5) Was infection introduced from communication with infected households? Sir Charles Cameron inclined to adopt the first of these solutions as the correct one, mainly, it would appear, because "one" of the milkers was, after being examined by a bacteriologist, removed from the duty of milking. Surgeon-Colonel Flinn, on the other hand, adopts the fourth solution as most probably correct. He accepts as the cause of the epidemic an un-notified case of fever which occurred in St. Joseph's Square in the immediate vicinity of the infected dairy a few weeks before the first case of the outbreak was notified. Sir Charles Cameron stated as his positive opinion that "this case of fever, supposing it to have been typhoid fever, was not the cause of the epidemic." It is a matter of extreme difficulty to come to any opinion on the matter, the discrepancies between the accounts of the two reporters being both numerous and important. It is necessary to draw attention to some of these.

Sir Charles Cameron reports that *one* of the milkers, having been examined by a bacteriologist, was taken from the dairy work. Surgeon-Colonel Flinn reports that *three* were so taken, and transferred to other employment. It is possible that one of the men was a "typhoid carrier"; is it likely that there were three "typhoid carriers" together?

Sir Charles Cameron says (a):—"It is alleged that in the month of August, 1908, the sewer from St. Joseph's Square was opened, etc." Surgeon-Colonel Flinn fixes the date at a different time (p. 107):—"I have, however, ascertained that the work of laying the new sewer in the vicinity of the dairy premises was only commenced on the 15th September." Neither observer considers the opening of this sewer to be of importance, Surgeon Flinn regarding it as too close in date to the outbreak, Sir Charles Cameron as too far from it. As the work in question was being done for or by the Dublin Corporation, it ought to have been possible to fix the date.

Sir Charles Cameron states (p. 77) that "no cases occurred until late in September." Surgeon-Colonel Flinn mentions (p. 107) that "the earliest case in the series was first medically attended on the 15th September," and adds: "No doubt this case had been incubating the disease for a week or more. Thus the commencement of the outbreak must be dated from approximately the first week in September."

In the face of such contradictory statements as these it is difficult to come to a conclusion as to the real causes of the outbreak. We see no reason, however, to alter the opinion we expressed some months ago that the dairy was infected from the case in St. Joseph's Square. Whether the infection was carried by deficient drainage or by personal communication we cannot say. It seems to be the fact, however, that the drain was laid open by the Dublin Corporation in the immediate vicinity of the dairy at a time when infective material was present in it. This is so, whatever be the exact date at which the drain was opened.

Another fact which seems to have hampered both Sir Charles Cameron and Surgeon-Colonel Flinn was their failure to retain the general services of a bacteriologist to assist them in their investigations. It is true that early in the investigation Sir Charles Cameron submitted certain material to a bacteriologist for examination. At a later date, however, this gentleman's services were obtained by the proprietor of the dairy, and he made certain further investigations in the interests of the latter. Sir Charles Cameron appears to find it a grievance that the results of these investigations were not communicated to him (p. 57). The

same bacteriologist is Bacteriologist to the Local Government Board, but that body does not seem to have made any demand on his services during the investigation.

## REVIEWS OF BOOKS.

### THE BODY AT WORK. (a)

THE reason for the writing and publication of a treatise of this nature is not at once apparent to the average professional man—nay, even to the scientist and to those who dabble in smatterings of science the work can hardly commend itself as a necessity. This criticism does not in any sense intend to convey the impression that Dr. Hill's work is not of a high class—full of interesting and correct facts, for to one who is acquainted with physiology the book is interesting and replete with information as far as it goes. An author may generally be relied upon to state in the preface his object in producing such a work. Let us therefore examine the preface with the view of unearthing the author's reason for placing on the market a popular text-book on physiology which runs into close on 450 pages.

He considers that physiological text-books are plentiful, but doubts "whether the interests of the amateur of science have been adequately cared for."

He says that the physiologists who write for medical students assume that their readers have passed through two years of preliminary training in physics, chemistry, and biology, and can also have their studies supplemented by practical work in a laboratory; further, they treat all parts of the subject with equal thoroughness. "In this book," he says, "I have endeavoured to describe the phenomena of life and the principal conclusions which have been drawn as to their interdependence and as to their causes in language which will be understood by persons unacquainted with the sciences upon which physiology is based."

This last statement is, of course, the point at which we feel inclined to join issue with the author. For instance, to anyone unacquainted with chemistry, the information will scarcely be readily assimilated that the molecular formula for the blood of the horse is  $C_{712}H_{1130}N_{214}S_2FeO_{245}$ . Further, "the tendency of proteins to break up along these two lines—the fatty acid line and the aromatic acid line—is of considerable interest. The one line is represented by acetic acid  $CH_3COOH$ ; the other contains the hexone radicle,  $C_6H_5$ ." Such sentences as this must indeed give pause to the amateur scientist who is unfamiliar with chemistry.

As a final criticism on the purpose of this work, it occurs to one to suggest that the amateur scientist who has "scorned delights and lived laborious days" in order to make himself familiar with all the physiological information contained in this volume, will feel aggrieved that "such sections of the subject as are generally considered unsuitable for ordinary discussion" have been passed over. Surely the reader who incurs the labour of making his own the knowledge here set forth, including that on the brain and the organs of special sense, would consider himself badly treated to find that he is not to learn anything of the physiology of, say, reproduction.

Having said so much in the nature of querulous criticism, it is but just that the highest praise should be bestowed upon the work from the standpoint from which it has been written.

The book is got up in first-rate style, and the illustrations and printed matter are excellent. We wish the author as large a circle of readers as his industry and distinguished position as a physiologist merit.

THE resignation is announced from the London Cancer Hospital of Mr. N. W. Bourne, M.R.C.S., who has been connected with that institution in various capacities for the past thirty years.

(a) "The Body at Work: A Treatise on the Principles of Physiology." By Alex. Hill, M.A., M.D., F.R.C.S., sometime Master of Downing College, Cambridge. With 46 illustrations. London: Edwina Arnold, 1908.

(a) "Report on the State of Public Health in Dublin for the year 1908," p. 71.



## LITERARY NOTES.

VOLUME VI. of Sir Clifford Allbutt's "New System of Medicine" on "Diseases of the Heart and Blood-Vessels" is announced by Messrs. Macmillan to be ready shortly. Volumes VII. and VIII. on "Diseases of the Nervous System" are in active preparation, and will complete the work.

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MESSRS. LONGMANS, GREEN AND CO. announce a new edition of "Quain's Anatomy," which will appear in four volumes, edited by Professors Schäfer and Symington, and Dr. T. H. Bryce. Vol. I. is now ready, Vol. III., Part I., is also ready, and Part II. of the same volume is in the press.

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FROM Mr. H. K. Lewis we have the announcement of a re-issue of Dr. Frederick Roberts' "Theory and Practice of Medicine" (10th edition), with an appendix bringing it up to date. The merits of this manual are so well known and appreciated as to render further comment unnecessary. The same publisher has just issued a work on "Immunity and Specific Therapy," by Dr. D'Este Emery, Clinical Pathologist to King's College Hospital.

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DIABETES is not only a common disease in India, but has a large mortality in that country. In a booklet of forty pages, entitled "The Dietetic Treatment of Diabetes," by B. D. Basu, Major I.M.S. (Retired), The Panini Office, Allahabad, India, the author deals with dietary alone, and quotations from well-known authorities on this disease are freely interspersed throughout, which is intended for the general public as well as the medical practitioner.

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A NEW edition of Dr. Jellett's "Magnum Opus: A Manual of Midwifery," is announced in the "University Series" by Messrs. Bailliere, Tindall and Cox. Among the many works issued from the press of recent years, this manual has been a distinct success, and the new edition has been re-written and brought up to date, with new illustrations throughout the work. The same publishers have also put forth this week a new edition of Mr. Shillington Scales' "Practical Microscopy," and a new work on "Sanatorium Treatment," by Dr. Rufenacht Walters, one of the pioneers of the Open-Air Treatment of Disease.

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"AN Appeal on behalf of the Government and People of China," by H.E. T'ang K'ai Sun (Morgan and Scott, London, 3d.) is a pamphlet of 32 pages dealing with the opium question, on the wrongs and rights of which we have heard a good deal. The pamphlet, as a matter of fact, is the speech of His Excellency T'ang K'ai Sun, when submitting resolutions on behalf of the Chinese delegation at the International Conference on Opium in Shanghai. Of the debasing and degrading results of the opium habit in China there can be no doubt, and we welcome any measures that may set the Government and people of the Chinese Empire free from this terrible vice—scourge it may almost be called.

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THE Editor of the *Girl's Own Paper and Woman's Magazine*, in the number for October, offers the following very sensible advice to the readers of that excellent magazine:—"Is it not time our girls realised that it is no more menial for them to be doing what is legitimately woman's work—the care and beautifying of a home—than to be working under men employers in city offices, and in many cases doing the work of office boys? The pernicious habit of regarding household work as 'menial' is one of the unfortunate products of the present half-educated times. It has been a serious mistake to teach girls smatterings of every imaginable subject, excepting the one she most needs in her after-life—home-making and home-keeping."

THE important paper to be read on anaesthetics by Dr. Frederic Hewitt, on October 25th, will be before the Medical Society of London, and not at the Royal Society of Medicine, as inadvertently stated in our last issue.

## MEDICAL NEWS IN BRIEF.

### The Health of Belfast.

In his annual report to the Belfast Corporation, Dr. Bailie, Medical Superintendent Officer of Health, states:—The death-rate, which is 19.5 per 1,000 of the population, whilst still high, is the lowest ever recorded for the city, and is 0.7 below that of the 22 principal town districts of Ireland. The number of cases of zymotic diseases notified is also the lowest on record, and the death-rate is comparatively low. During the first quarter of the year the number of persons suffering from chest diseases was considerably above the average, those principally affected being infants and aged persons. The average annual death-rate for the quarter was also correspondingly high, being 11.3 per 1,000, whereas the rate recorded for the year was only 7.4 per 1,000. The population of the city is set down as 380,344, and the density of occupation 25.8 persons to an acre. The number of deaths registered as having been caused by phthisis (pulmonary tuberculosis) was 880, or 11.69 per cent. of the total deaths registered from all causes, which is equal to a rate of 2.3 per 1,000 of the population, or, in other words, 1 in every 432 of the population died from this disease during the year under review. In the year 1907 the number of deaths attributed to this cause was 926, being 1 in every 399 of the population. The average annual rate of mortality from tuberculosis during the 13 years 1893-1905 was 3.2 per 1,000, but has since steadily declined, the rate for the years 1906, 1907, and 1908 being 2.7, 2.5, and 2.3 per 1,000 respectively.

### Notification of Births—Confusion in Potteries Jurisdiction.

At the Stipendiary's Court at Burslem, on the 21st instant, Dr. William S. Allen, practising at Burslem and Tunstall, was charged under the Notification of Births Act, 1907, with failing to notify a birth to the Medical Officer of Health within thirty-six hours. For the defence it was admitted that the required notice had not been given, but it was through a misunderstanding. Dr. Allen took the Tunstall work, and his partner, Dr. Williams, the Burslem work. Dr. Williams had been in the habit of sending in the notices required by the Act as concerned Burslem, and so far as Dr. Allen was concerned the Act had not been adopted in Tunstall. The birth in question occurred in Pinnox Street, Tunstall, and the boundary of Burslem and Tunstall went through Pinnox Street. For all practical purposes Pinnox Street was in Tunstall, but it was partly under the jurisdiction of Burslem. Dr. Allen was not aware of the latter fact, or he would have given the usual notice. There was a second summons with regard to another birth in Pinnox Street, and the same defence was offered. The Stipendiary accepted the explanation offered, and merely made an order for the payment of costs in the two cases. Mrs. Eliza Shaw, nurse, was summoned for failing to notify a birth; and Mrs. Helen Porter, nurse, was charged with failing to notify two births. All three summonses were with respect to Pinnox Street and the immediate vicinity, and defendants urged that they thought they were in Tunstall, where no notification was required. Defendants were ordered to pay the costs in each case.

### Medical Sickness and Accident Society.

At the last monthly meeting of the Executive Committee of this Society it was stated that the business of the Society is still growing in a satisfactory manner. Every year shows an increase in the number of members and the amount of the invested reserves, while the amount paid away in sickness claims does not exceed what is expected and provided for in the tables of contributions. The Society has no agents and pays no commission, while the funds earn considerably more interest than is assumed in the valuation of the business. The substantial surplus thus produced allows of the payment of a handsome bonus to those members who reach the age of 65.

**Sudden Death of a Medical Man.**

MR. WALTER SCHRÖDER held an inquest at Marylebone, on the 23rd instant, on the body of Eustace Rhodes St. Clair Corbyn, M.B., M.R.C.S., late of Merivale, Beckenham Road, Beckenham, Kent.

On the previous Tuesday afternoon Dr. Corbyn, it appeared, came to town to meet Sir John Tweedy, of Harley Street, W., in consultation about a patient. Subsequently, accompanied by the patient, he went to the shop of Messrs. Curry and Paxton, opticians, Great Portland Street, W., where, within a minute or two of their arrival, Dr. Corbyn suddenly dropped on the floor. Life was found to be extinct by Dr. Florence E. Willy, of Devonshire Street, W., who was called in. Having made an autopsy, she ascribed death to syncope, consequent on advanced aortic disease of the heart. She was of opinion that death was instantaneous.

A verdict of death from natural causes was returned.

**Beri-beri at Shields.**

AN outbreak of beri-beri has been notified as having occurred on board the Brazilian cruiser *Barroso*, which recently arrived in Shields Harbour, after calling at several other English ports. Some men were removed to hospital at Shields after the vessel's arrival there, but were cured, with the exception of three, who are still detained. Sixteen others of the crew are now in hospital, where there are now in all 19 patients, all suffering from beri-beri.

**Coroner and Peculiar People.**

AT a recent inquest at Southend on Mrs. Rose Bundock, aged 52, a member of the Peculiar People, medical evidence showed that death was due to intestinal obstruction. Mrs. Bundock had declined to see a doctor. Dr. Silva Jones, who made a post-mortem examination, stated that, in his opinion, the deceased might have been relieved or cured by an operation which, however, would have been a dangerous one. The jury returned a verdict in accordance with the medical evidence. The Coroner (Mr. C. E. Lewis) said those who had attended the woman during her illness were morally responsible for her death. He was confident himself that if an operation had been performed the woman's life would have been prolonged, if not saved. He hoped they would bear in mind what he had said for the rest of their lives. But for the fact that the woman's complaint was a complicated one, he should have sent the depositions to the Director of Public Prosecutions.

**Death under Chloroform.**

AN inquest was held, at the Warrington Coroner's Court, on the 20th inst., into the death of Edward Howard, 2 years of age, who died whilst under an anæsthetic at the Infirmary. Dr. Johnson, Senior House Surgeon, said the child was admitted into the institution as an in-patient, suffering from adenoids. The child was prepared for the operation, and Dr. Green administered one drachm of chloroform, but before the operation was performed the child suddenly stopped breathing, and measures were at once used to resuscitate the child, but without success. The amount of chloroform used was, in his opinion, insufficient for the sudden stoppage of breathing. Death was due to respiratory failure caused by the obstruction in the air passages due to enlarged tonsils and an abscess. The jury returned a verdict of "Death from misadventure."

**A Midwife's Experience.**

AT an inquest on an infant recently, at Yarmouth, Mrs. M. Sutton, a midwife, asked by the coroner if she had had any experience, said that she had attended at the birth of 9,037 children in 55 years. She began, she said, when she was 20, and had never lost a single case. In one year she attended 500 cases, and had entered every one in a book. The coroner said this was a "record" in his experience, and he congratulated the witness.

**The London Medical Exhibition.**

THE Fifth London Medical Exhibition is announced to take place next month at the Vincent Square Hall. The great success of the previous exhibitions had been

due to the fact that the affair is restricted to medical men, a feature that will be fully maintained upon the present occasion. We understand that the intention is to make this a huge social function. Further details will appear in due course.

**Death Caused by Wasp Sting.**

AS the result of the sting of a wasp, Mary Jane Charteris, 26, who lived at Rosehall Johnstone, Dumfriesshire, has died. She was going into church on Sunday, when a wasp stung a finger of her left hand through the glove. She felt the pain during the service, and afterwards became faint, and had to be assisted to a doctor's house. Blood poisoning set in, and she expired after several days' serious illness.

**Royal College of Surgeons of England.**

THE next Primary and Final Examinations for the Diploma of Fellow of this College will commence on Thursday, November 4th, and Monday, November 22nd. Candidates are required to give not less than fourteen days' notice of their desire to present themselves for either of these examinations.

The Examinations for the Licence in Dental Surgery under the Old Regulations will commence on Friday, November 5th, and for those under the New Regulations on Friday, November 5th. Candidates intending to present themselves for this examination must address the Secretary (Mr. F. G. Hallett), Examination Hall, Victoria Embankment, W.C., from whom all particulars relating thereto may be obtained.

**The Royal University of Ireland.**

THE following have passed the Second Examination in Medicine (those marked with an asterisk may present themselves for the further examination for Honours):—

Upper Pass.—\*John H. Beverland, \*George H. Mahony, \*Thomas Marron, \*George R. Naylor, \*Patrick J. Walsh.

Pass.—Samuel Acheson, James P. Aiken, Thomas Black, Dominick J. Cannon, Francis L. Cleland, Thomas F. Colfer, Christopher Costello, Daniel J. Enright, Edward H. Fennessy, Llewellyn D. J. Graham, John E. Harford, Richard Hennessy, John R. Henry, John V. Holmes, William J. Hunter, B.A., Frederick Jefferson, James T. Kyle, Charles Lafferty, John McFadden, Edward McSorley, William M. Morris, Herbert V. O'Shea, John F. Rahilly, Walter N. Rishworth, John M. Sheridan, Thomas Smyth, B.A., Stanley P. Stoker, Harold V. Walsh, Samuel E. Watson.

The following have been exempted from further examination in the subjects set opposite their names:—Thomas M. Adamson, Chemistry; William Hickey, Anatomy and Physiology; Thomas F. O'Donoghue, Chemistry; John H. Pollock, Anatomy and Physiology; William Turner, Chemistry.

**St. Mary's Hospital Medical School.**

THE following gentlemen have been elected to Entrance Scholarships, subject to confirmation by the Governing Body of the Medical School:—

University Scholarships.—50 Guineas, Horatio Thomas, University Coll., Cardiff; 50 Guineas, T. H. Phillips, University Coll., Cardiff.

Open Scholarships in Natural Science.—£145, R. W. Davies, King Edward's School, Birmingham; £50, F. W. MacAlevey, Mount St. Mary's Coll., Chesterfield; £25, J. E. Cheesman, South-Western Polytechnic.

Epsom College Scholarship.—D. R. Alexander.

**Charing Cross Hospital Medical School.**

THE following Entrance Scholarships have been awarded:—The Epsom Scholarship (60 Guineas) to Mr. Duncan W. Pailthorpe; the Livingstone Scholarship (75 Guineas) to Mr. Francis J. Hallinan; the Huxley Scholarship (50 Guineas) to Mr. David B. S. Jones. An Entrance Scholarship has also been awarded to Mr. Harold W. Williamson (30 Guineas); an Universities Scholarship of 50 Guineas to Mr. J. Milton Davies; and an Universities Exhibition of 20 Guineas to Mr. Abel Evans, both of the London University.

## NOTICES TO CORRESPONDENTS, &c.

**CORRESPONDENTS** requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

### SUBSCRIPTIONS.

SUBSCRIPTIONS may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s.; post free at home or abroad. Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially-appointed agents. Indian subscriptions are Rs 15.12. Messrs. Dawson and Sons are our special agents for Canada.

### ADVERTISEMENTS.

FOR ONE INSERTION:—Whole Page, £5; Half Page, £3 10s.; Quarter Page, £1 5s.; One-eighth, 12s. 6d.

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ORIGINAL ARTICLES OR LETTERS intended for publication should be written on one side of the paper only and must be authenticated with the name and address of the writer, not necessarily for publication but as evidence of identity.

"GALL-STONE" (J. H., Chelsea).—(1) By the Oaths Act, 1888, a person objecting to the ordinary form of taking the oath is permitted to swear, with uplifted right hand, in the Scotch fashion, at the same time declaring, "I swear by Almighty God (as I shall answer to God at the Great Day of Judgment) that I will tell the truth, the whole truth, and nothing but the truth." (2) "Billin," the composition according to Wright's Annual 1908 (p. 612), is an extract from folia helminthocorte, folia jaborandi, ranunculus albus, and folia tanacetii. Its action has been highly spoken of by various authorities.

A SURREY G. P.—The best way of treating nevus in infants is by multiple electrolytic puncture—carried out under a general anæsthetic.

### THE POSTMASTER-GENERAL AND THE POST OFFICE DIRECTORY.

A CORRESPONDENT informs us that recently he called the attention of the Postmaster-General to what appeared to be an arbitrary handling of medical qualifications in the London Post Office Directory. In answer the Postmaster-General denied any responsibility whatever for what appeared in that publication. Considering that the royal arms appear on the cover and that the work claims to be official, the sooner the Postmaster-General asserts his claim to control the book in question, the better for the public.

CHRISTIAN SCIENCE.—We have received another characteristic letter from Mr. F. Dixon. We have already said we cannot publish any more of these effusions. Mr. Dixon believes that every kind of disease can be cured by the ministrations and prayers of paid agents of Christian Science. No sane medical man will care to discuss this claim to miraculous powers that are purchasable at the price of 5s. and upwards for a seance. Mr. Dixon ends with this statement:—"That the fees received by Christian Scientists are, like those received by the doctors and the clergy, the natural adaptation of Jesus' words to the western habits of another age. If, he says, 'we have sown unto you spiritual things, is it a great thing if we shall reap your carnal things?'"

PATER.—The Army Medical Services, both British and Indian, now offer a very satisfactory career for men with a taste for military life, and afford certain roads to success in every sense of the word to those of superior capacity, and determined to work.

## Meetings of the Societies, Lectures, &c.

TUESDAY, OCTOBER 5TH.

ROYAL SOCIETY OF MEDICINE (THERAPEUTICAL AND PHARMACOLOGICAL SECTION) (20 Hanover Square, W.).—4.30 p.m.: A Discussion will be held on The Teaching of Therapeutics in the Hospital Wards. The Discussion will be opened by Sir Clifford Allbutt, Prof. Osler, Dr. Harrington Sainsbury, Dr. Calvert, Dr. Robert Hutchison, and Prof. Dixon will take part.

## Vacancies.

Hertford County Hospital.—Resident House Surgeon and Secretary. Salary £100 per annum, with board, washing, and apartments. Applications to the Chairman of the Board.  
City of Chester.—Assistant Medical Officer of Health. Salary £250 per annum. Applications to J. H. Dickson, Town Clerk, Town Hall, Chester.

The Hospital for Sick Children Great Ormond Street, London, W.C.—A House Surgeon. Appointment for six months. Remuneration £30, with board, washing, and residence in hospital; also Anæsthetist (honorary). For further particulars see advt.

County Asylum, Rainhill near Liverpool.—Assistant Medical Officer. Salary £150 per annum, together with furnished apartments, board, attendance, and washing. Applications to the Medical Superintendent.

Royal Buckinghamshire Hospital, Aylesbury.—House Surgeon. Salary £100 per annum, with board, washing, and lodging in the Hospital. Applications to Stanley E. Wilkins, Secretary, 25 Walton Street, Aylesbury.

Infirmity and Workhouse of the City of London Union.—Assistant Medical Officer. Salary £150 per annum, together with furnished apartments, rations, and washing. Applications to Edward R. Woodward, No. 61, Bartholomew Close.

## Appointments.

BROOMHEAD, C. H., M.B., Ch.B.Vict., M.B., B.S.Lond., House Surgeon at the Salford Royal Hospital.

BROWN, GEO. ABRUCKLE, M.B., C.M. (Hon.), B.Sc.Glasgow, Chief Medical Officer for the inspection of children under Govan School Board.

DESPREZ, HENRY SOULBIET, L.R.C.P. and S.Edin., L.F.P.S.Glasg., Medical Officer for the Northampton District by the Okehampton (Devon) Board of Guardians.

EVANS, RICHARD, M.R.C.S., L.R.C.P.Lond., Medical Officer to the No. 3 District of the Wrexham Board of Guardians.

GOUGH, WILLIAM, B.Sc., M.B., B.S.Lond., F.R.C.S.Eng., Honorary Assistant Surgeon to the Hospital for Women and Children at Leeds.

HOLDEN, WILLIAM, M.B.Edin., Resident Medical Officer to the Victoria Hospital, Burnley.

JONES, ARTHUR WILLIAM LLEWELYN, L.R.C.P.Lond., M.R.C.S., Medical Officer and Public Vaccinator for the Kingsteignton District by the Newton Abbot (Devon) Board of Guardians.

KERR, CHARLES, M.B., C.M.Edin., Clinical Medical Tutor in St. Andrew's University.

MACINTYRE, JOHN, M.B., C.M.Glasg., Inspector for the Medical Examination and Supervision of School Children for the County of Lanark.

MILNE, F. M., M.B., Ch.B., St. And., Lecturer in Clinical Pathology in St. Andrews University.

PARRY, T. WILFRED, M.B., Ch.B.Liverp., Assistant Medical Superintendent to St. Giles' Infirmary, Camberwell.

ROBERTS, ERNEST T., M.B., C.M., M.D.Edin., Chief Medical Officer for the inspection of children under the Glasgow School Board.

SHARPE, F. A., M.B., B.S.Lond., D.P.H., Senior Assistant Medical Officer of Health and School Medical Officer for the County Borough of Derby.

WALKER, E. A., M.B., Ch.B.Edin., Resident Surgical Officer at the Salford Royal Hospital.

WEATHERBE, PHILIP, M.B., Ch.B.Edin., Honorary Surgeon to the Children's Hospital, Halifax, Canada, and Associate Professor of Surgery to the Halifax Medical College, Canada.

Royal Isle of Wight County Hospital, Ryde.—Resident House Surgeon. Salary £125 a year. Applications to the Secretary.

Royal National Orthopaedic Hospital, 234, Great Portland Street, W.—Resident House Surgeon. Salary, £100 per annum, with board, residence, and washing. Applications to the Secretary.

Govan District Asylum, Hawkhead, Paisley.—Second Assistant Medical Officer. Salary £150 per annum, with rooms, board, laundry, and attendance. Applications to the Medical Superintendent.

## Births.

JACKSON.—On September 20th, at Bridlington, the wife of Dr. T. C. Jackson, of Hull, of a daughter.

LUND.—On September 25th, at 8 Collingham Road, London, the wife of Kenneth F. Lund, M.B.Lond., of a daughter.

MARTIN.—On September 20th, at Court, Cullompton, Devonshire, the wife of Captain J. F. Martin, R.A.M.C., of a daughter.

## Marriages.

CHIDELL—WESTALL.—On September 21st, at St. Matthias's Church, Richmond, Surrey, Claude Churchill Chidell, M.B., B.S.Lond., to Ethel Alicia Isabel, youngest daughter of the late William Westall, of Rydal, Worthing.

DINGLE—WHITELAW.—On Aug. 16th, at St. Michael's Sandakan, B.N. Borneo, Percival A. Dingle, M.R.C.S., L.R.C.P. (Lond.), son of W. A. Dingle, M.D., J.P. of London, to Norah, widow of Dr. T. Buchanan Whitelaw, Tyldesley.

DOUZY—WILLS.—On September 21st, at St. Paul's, Knightsbridge, Edward Henry Douzy, M.A., M.D., of Cannes, to Kathleen Mary Hamilton Wills, youngest daughter of the late Sir Frederick Wills, Bart., and Lady Wills, of 9 Kensington Palace Gardens, London.

GROGHEGAN—PICKTHORN.—On Sept. 23rd, at St. Mary's, Hammer-smith, Staff-Surgeon Herbert Lyne Groghegan, M.D., R.N., son of the late Stannus Groghegan, to Ella, only daughter of the late Inspector-General T. Russel Pickthorn, R.N.

WARE—MAUDE.—On Sept. 21st, at St. Mary's Church, Eastbourne, Arthur M. Ware, M.D., of 15, Launceston Place, De Vere Gardens, Kensington, to Edith Frances Maude, eldest daughter of Ashley H. Maude, J.P., Eastbourne.

## Deaths.

BISS.—On September 20th, at Eastbourne, Hubert Biss, M.A., M.D., D.F.H., aged 37, assistant Editor of THE MEDICAL PRESS AND CIRCULAR. Friends kindly accept this, the only intimation.

# THE MEDICAL PRESS AND CIRCULAR.

"SALUS POPULI SUPREMA LEX."

VOL. CXXXIX.

WEDNESDAY, OCTOBER 6, 1909.

No. 14.

## NOTES AND COMMENTS.

**The Suffragettes and Forced Feeding.** THE fierce onsets of the Suffragettes have led to various variegated tactics in the ding-dong fight against law and order. When women take to throwing tiles from housetops on the heads of the crowd below most sober citizens will feel that it is time to interfere decisively, for they have, in such a case, forsaken the region of legitimate agitation for that of criminal lunacy. Indeed, it becomes a moot question whether many of these hysterical females are not mentally irresponsible for their actions. Can a sane woman, for instance, refuse food until she dies simply because the wisdom of the ages has so far refrained from granting her the Parliamentary franchise? It is open to doubt if a woman who starves herself on such a ground persistently and obstinately is one whit more responsible than the asylum lunatic who refuses food as a part of his madness and is promptly fed by means of a stomach-pump. One of the manoeuvres of the Suffragette in prison has been to refuse food, whereupon the authorities have hitherto been in the habit of granting them a discharge. But the move of starvation has been met by the countermove of hospital treatment and forced feeding by the agency of a stomach-pump. The usual question has been asked in the House as to the incident. It was answered by the Home Office explanation that "the treatment in such cases is the ordinary treatment which has frequently been applied both to men and women in the case of contumacious or weak-minded persons who refuse food."

**An Appeal to the Stomach.** THIS direct appeal to the stomach in reply to a bid for the crown of martyrdom suggests a sense of humour which one does not usually associate with the Home Office. Seriously speaking, however, there is no apparent reason why the Suffragette woman should be treated preferentially in prison because she is a political offender! When some unfortunate man has his face scratched and his coat torn by one of these infuriated women the question of politics does not enter into the case. Nor does the householder think unduly about the Parliamentary suffrage while contemplating his shattered dining-room windows. Nor would the friends of an unfortunate citizen whose skull had been cloven by a roof-tile hurled by way of political protest from a house-top be likely to try and stop criminal proceedings. There is no reason why criminal administration should be mitigated to meet the case of the Suffragette who commits an unprovoked and aggravated assault. As to forced feeding, if it is a plain and bounden duty of prison officials to resort to it in the case of ordinary

contumacious or feeble-minded prisoners, why not of the Suffragette who, by her absurd actions, places herself within either category? It seems to the writer, as a medical man not altogether unversed in the ways of mentally irresponsible persons, that a woman who deliberately starves herself under the circumstances in question can hardly be sane. Anyway, the Home Secretary has acted decisively and the outside public awaits the next move with not a little amusement.

**"Home Remedies."** ONE hopes that as the ages speed along the general spread of education may lead to an intelligent appreciation of some of the more important principles of medical science. After all, it may be not so much a matter of recognition as of application in practice, for our forefathers in earliest times framed the familiar proverb that "cleanliness is next to godliness." Some of the educated classes have profited by the surgical experiences of themselves and of their friends and apply the principles, for instance, of asepsis in the home circle. Not long ago the writer heard a medical man relate with glee how a certain learned barrister, having scalded himself by accident, dressed the wound with antiseptic dressings and cut away the blisters that formed later with scissors that had been boiled for ten minutes. Culture of that highly specialised degree, however, will probably take a long time to filter through to the man in the street. Meanwhile, a vast proportion of our fellow countrymen trust to home remedies applied to minor injuries without regard to the refinements of aseptic methods. At a recent inquest in Manchester upon a child who had died from erysipelas, which came on three weeks after vaccination, the mother admitted she had taken the dressing off and rubbed some cold cream into the pock with her fingers. This meddlesome use of a "home remedy" cost the life of the child and has furnished a case that will doubtless figure largely in future anti-vaccination literature.

**The Culture of Medicinal Plants.** At the opening ceremony of the Pharmaceutical Society's session on Wednesday last, an address on the above-named subject was delivered by Professor Tschirch, Rector of the University of Bern. The most interesting passage of the address was perhaps that devoted to discussion of the problem: "In what way is it possible by suitable cultivation to increase the amount of this or that constituent of a medicinal plant, and to diminish the quantity of any other constituent that may appear to be an undesirable ingredient, Professor Tschirch presented ample evidence in support of his belief that by variation of conditions of cultiva-

tion; by careful selection of suitable strains; by crossing, grafting and by other means brilliant results can be obtained. In most of such experiments the first sod has only just been turned. The experience gained in cultivation of cinchona has, however, already made the attainment of definite results seem very possible; so that the production of a cinchona bark rich in quinine, and containing only small quantities of other alkaloids, and of an opium poor in narcotine, appears well within the grasp of science. An increase in the amount of valuable constituents has been effected in the case of almost all cultivated plants, a fact which disposes of the popular error that wild ones are always—and without exception—the better for pharmaceutical purposes.

## LEADING ARTICLES.

### THE MEDICAL PROFESSION ON COLLECTIVE DEFENCE.

OF recent years the medical profession have on various occasions and in various ways exercised their power collectively, in other words, they have learnt to some extent the art of organisation. The friendly societies and the local Poor-law authorities, for instance, are no longer able to ride roughshod over the interests of a "disorganised rabble," but nowadays find themselves called upon to face a strong and powerful Association numbering upwards of 20,000 members. By means of a "black list" medical men are warned against applying for appointments in which either the salaries or the terms and conditions of the post are derogatory to the dignity and the deserts of the medical profession. That the "black list" is by no means a perfect weapon of defence is shown by its apparent failure in the Hampstead Hospital case, which two annual representative meetings of the British Medical Association have apparently failed to push to a conclusion. Then, again, there is no means of dealing effectively with medical men who apply for medical aid or Poor-law posts that have been publicly banned by the authoritative voice of the majority of their fellows. For all that, a vast deal has been achieved in the education of the public as to the facts of the Public Medical Service, which is an absolute and real necessity to the welfare of the community. The principle involved in collective self-defence is frankly that of trades unionism. However much the term may have been disliked by a former medical generation, it should be borne in mind that their refusal to look the business side of professional life frankly and squarely in the face has been, to a great extent, answerable for the present state of affairs, in which every social and political organisation appears to regard medical men as *par excellence* the natural agents for the exercise of vicarious charity. One of the meanest of all these impositions is that disclosed by the recent Report of the Poor-law Commission, which says, for example, "It is undeniable that the majority of medical officers, in- or out-door, are paid salaries miserably inadequate." And again, "There is a policy of sweating, both as to the amount of work required and as to the payment made for it." Possibly,

when the long-awaited Reform of the Poor-law is at hand we shall find the salaries of medical men fixed on a liberal scale by a strong central administrative authority instead of by parsimonious local boards. Fortunately, in this case it would be out of the question for the State to attempt to get the work done gratuitously, as was done in the recently imposed duty of the registration of births—because even a struggling profession must draw the line somewhere. The medical work of the voluntary hospitals is for the most part unpaid, but if the State were to ask gratuitous medical service for the Poor-law their various organisations would speedily be unstaffed. Yet the State is doing something of the kind indirectly by permitting school boards to apply to voluntary medical charities for the treatment of defective school children. It is devoutly to be hoped that the members of the staff of certain London hospitals—some of which have played into the hands of the enemy—will refuse to betray their professional brethren in the demand for proper remuneration for the discharge of this particular duty, namely, the skilled medical treatment of school children. The fact is that the medical profession as a whole has not yet learned the value of collective action. Their united strength is well nigh unbounded. Supposing a general medical strike were declared the business of the nation would be brought to a standstill. What would happen if there were no medical men—even for a single day—to attend to the accidents and the sickness that affect society? The suggestion of such a situation may appear remote and fanciful, but it is founded on a basis of solid fact, inasmuch as the life of the nation could not be conducted in a satisfactory manner, even for a single day, without the incessant ministrations, paid and unpaid, of the medical profession. The time appears to be now at hand when medical men are learning the vital necessity of combination for the purpose of collective defence. The art in question has long ago been acquired by the lawyers, who, in the course of many generations, have unobtrusively entrenched themselves in an unassailable position. One good thing to be learnt from the legal profession is the need of a strong body armed with full powers for the prosecution of false practitioners, and that is doubtless one of the first matters to which a popularly elected and representative General Medical Council will give their earnest attention.

### SANITATION AT GRAVESEND.

DR. R. J. REECE's report to the Local Government Board on the sanitary administration of Gravesend discloses a state of things to which the cant phrase, "truly appalling," seems for once quite applicable. In this matter Gravesend does not, however, stand alone. We are frequently pointing out, and quite lately we proved, with regard to some thirty urban and rural districts in Yorkshire, that the fundamental requirements of health laws are being more or less systematically neglected widely throughout the country. On occasion we have insisted that the fault lies almost

invariably with the public. Ratepayers refuse to take interest in local affairs, and, in consequence, men of capacity and independence decline to serve on the authorities. In many places the authorities are dominated by mean and ignorant men who seem incapable of understanding the importance of sanitary laws, whilst their sole preoccupation is to keep down the rates at any cost. Besides this, a contingent of such boards often consists of men who hold their positions with the set purpose of preventing the administration of laws which conflict with their own personal sordid interests. On a body so made up a minority of enlightened, earnest men are, of course, powerless. They are continually outvoted, whilst public opinion, to which they might appeal, is altogether lacking. It is not to be wondered at, under those circumstances, that the chief officials of the Local Government Board seem, as we lately suggested, more and more in favour of substituting the rule of the Board, a system, in fact, of bureaucracy, for the present so-called democratic rule—a rule in which the bulk of citizens decline to take part, and which, therefore, in the true sense of the word, is far from democratic. Beyond the fact that Gravesend is a borough with a Corporation, Mayor and Town Council, we know nothing about the constitution of the authority, and cannot judge upon whom, if upon any individuals, the blame for the present shocking conditions lies. In the first place, the medical officer is engaged to devote only a part of his time to duties which Dr. Reece declares are enough to occupy the officer fully; and an additional sanitary inspector is, moreover, needed. We have over and over again described the position of humiliation, and even degradation, in which medical officers of health find themselves under conditions that seem to prevail at Gravesend. They are the servants of the authority; it is as much as their place is worth to protest against abuses which their masters choose to tolerate; any public speech, or disclosure through the press, would mean dismissal; the most they can do is mildly to expostulate with the sanitary committee when sitting in private. The population of Gravesend is upwards of 30,000 living on an area of 1,253 acres. There are very few sewers, and these lack efficient flushing and ventilation. Nearly the whole sewage of the town is collected in cesspools. These vary in depth from a few feet to sixty feet or more. There exist no binding regulations as to the distance from houses the cesspools shall be sunk, or as to their situation, so that in many instances they are within a few feet of each other, quite close to dwellings, and in a few cases beneath them. In the last eight years 550 cesspools have been added to those previously in use, the total being now over 6,000. Only about 1,000 of these receptacles are emptied annually, but many have not been emptied for thirty years, and many have never been emptied at all. In some cases, when the cesspool has become full, the drains have been connected with the house wells—the water being no longer needed for domestic purposes, owing to the extension of the water company's service. Most of the wells are deeper than the cesspools, and,

penetrating the water-bearing strata of the chalk, form possible sources of contamination of the water company's wells, and perhaps of more distant sources. The fact that the Thames Conservancy recently took proceedings against the Town Council for polluting the Thames is suggestive; the case remitted from the local Bench is now to be tried in the High Court. This story of the cesspools alone forms a tolerably strong indictment of the Gravesend authorities. They seem to have prepared the ground for a virulent outburst of disease; the magazine is filled, the train laid, and it depends upon a chapter of accidents whether or not an explosion shall follow. If they do not make haste to put their house in order, the Gravesend authorities may find themselves, like their Maidstone neighbours, some years ago, in a situation from which they will not emerge without being made to witness much misery, to deplore the loss of many valuable lives, and to face an expenditure much greater than could have been needed to render such a calamity altogether impossible. Finally, the Town Council might well bear in mind the fact that in the event of an outbreak of typhoid fever arising from their negligence, they would be liable for damages to every inhabitant or visitor who should suffer from the disease.

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## CURRENT TOPICS.

### Medical Referees.

THE provision for the appointment of medical referees to sit on the bench with judges and to give impartial advice was one of the good features of the Workmen's Compensation Act. There has been some delay on the part of the Home Secretary in filling up these appointments, for reasons that are not apparent to the outside world. The question has been recently revived, and it is to be hoped that Mr. Herbert Gladstone will now take some more decisive steps towards providing an adequate supply of medical referees. The experience of the working of the new Act has shown that most of the cases hinge on medical points, some of them of an obscure and highly technical nature. No layman can possibly arrive at a satisfactory conclusion with regard to these difficult investigations, especially when faced with conflicting evidence from medical witnesses on either side. The latest suggestion is that the medical referee should replace the medical witnesses, but that his examination of the plaintiff (or defendant) patient should be made in the presence of the medical men engaged on both sides. It would obviously tend towards raising the dignity of the medical profession if some such course were adopted, and it would probably assist in advancing the ends of justice. For our own part THE MEDICAL PRESS AND CIRCULAR has for a long time advocated the establishment of a medical board of referees for all courts of justice, from police courts upwards.

### Wage Deduction for Medical Attendance and the Truck Act.

AN important decision was recently given in the Dunfermline Sheriff Court. The pursuer sued the Fife Coal Company for 1s. 6d., being three fortnightly sums of 6d. deducted from his wages



on account of medical attendance. Sheriff Shennan said that "There is no doubt that, under Section 25 of the Truck Act, 1831, a deduction for medical attendance is legal, provided that the agreement for such deduction shall be in writing, and signed by the workman. It is admitted that on every payline signed by the pursuer his receipt embodied an authorisation to the defenders to deduct from my wages in future so long as I am in your employment the amount of my house rent, also the sums paid by you for medicine and medical attendance." Although the Sheriff said there were sufficient grounds for settling that particular case, it was nevertheless easy to see that difficult legal questions might be raised, but these he did not propose to raise and discuss. At the same time he expressed a hope that an earnest attempt would be made to avoid future misunderstandings, and concluded with the highly sensible and practical remark that in the medical sphere the interests of masters and men were identical. It seems a pity that the medical profession should be involved in an industrial wrangle of so narrow and paltry a nature as that involved in the above case.

#### Science and Tropical Disease.

THE rapidly increasing control of tropical disease by medical science has formed a permanent theme in these columns recently and during late years; it is strikingly illustrated once more in the report on the health of Sierra Leone just presented to the Colonial Office by the Governor, Mr. Leslie Probyn. Thanks to the discovery that the disease is due to the bites of infected mosquitoes, the scourge of malarial fever has been materially abated, and the sobriquet, once well justified, "the white man's grave," has become a libel on the Colony. The improvement is ascribed almost entirely to the untiring zeal and labours of the medical officers. Their teachings have made colonists and natives alike to realise the fact that by quite easy precautions—including temperance—disease once thought unpreventable may be almost entirely avoided. The new knowledge has become widespread. It is taught in the native schools; and the Protectorate natives of Free Town, about one-third of the population, enter seriously upon the task of keeping their compounds clean and free from stagnant water. The total statistics of Free Town demonstrate the efficacy of these measures. In 1907 the deaths from malarial fever numbered 202; last year they dropped to 150. The Municipality makes strenuous endeavours to keep the natives up to the sanitary mark, whilst the chiefs in native towns are stimulated to action by the presentation of prizes in the form of handsome swords—gifts which they are very anxious to acquire and to keep, and this they can only do by maintaining their towns in a good sanitary condition. It would be pleasant if it could be added that the labours of the medical officers in thus preventing the sacrifice of human life at the risk of their own had been rewarded by honours and gifts such as are usually lavished on other servants of the State whose achievements—like, for example, those of soldiers—strike more possibly the imagination, but are in no sense more valuable to humanity or to the Empire.

#### Socialism and the Profession.

THE *Anti-Socialist* prints the following questions and answers taken from one of the lessons in the "Red Catechism" compiled for the use of children in Socialistic Sunday Schools:—

"Have poor people objections to the present hospitals?—Yes. They are afraid that the students and the doctors will make experiments upon them. Why do doctors make experiments upon poor people? Because it gives them experience which they can sell to the rich. Are hospitals used as training schools for young doctors? Yes. Do students practice upon the rich?—No. The rich will not tolerate it."

The *Anti-Socialist* states that in the Socialistic press the medical profession has been the object of unscrupulous and malignant attacks more than any other section of the community except the capitalists. Seeing that the profession is the only one which constantly gives its services to humanity without fee or reward, our contemporary fails to understand these attacks on any rational grounds, and characterises them as one of the most extraordinary features of the Socialistic campaign. The feelings which these calumnies express are, we believe, to be accounted for, at least in some measure, by the anti-vivisectionist and anti-vaccinationist propaganda, which are directed mainly to the poorer and more ignorant classes. Persistently and, for many years, the anti-vivisectionists have virtually held up the profession to execration as the supporters of "anti-human wretches," who devote their lives to the infliction of torture upon dumb brutes, well knowing that the results must be of more than doubtful value. The anti-vaccinationists have in the same way constantly charged the whole profession—those whose duties do not include vaccination, as well as those who perform the operation—with carrying on for paltry gain a gigantic conspiracy by which a loathsome poison is disseminated among the people, including the doctors' own children, whom they sacrifice to cloak their hypocrisy. Fortunately the good faith of the medical profession is appreciated by the vast majority of our countrymen.

#### Public Health Administration in Ireland.

IN a special article last week we drew attention to the curious discrepancies between the reports of two public servants regarding the lamentable outbreak of typhoid fever which occurred in one of the residential suburbs of Dublin twelve months ago. The Clontarf outbreak was investigated by Sir Charles Cameron, for the local sanitary authority, the Corporation of Dublin, and by Surgeon-Colonel Flinn for the Local Government Board. Under such circumstances the public had a right to expect that there should be a thorough scientific investigation, that blame should be properly apportioned, and that steps should be taken to prevent further outbreaks from similar causes. None of these expectations have been fulfilled. The many discrepancies between the reports of Sir Charles Cameron and Surgeon-Colonel Flinn, the carelessness in neglecting to ascertain easily ascertained facts, and the contradictory conclusions reached,

leave us without any certainty that either report is to be regarded as accurate or thorough. Both cannot be accurate, and one of them must be seriously and culpably inaccurate. Differences in conclusions may be inevitable, since conclusions are to a great extent matters of individual judgment, but the public has a right to demand a strictly accurate account of the facts of such a grave outbreak of disease as that which occurred in Clontarf last year. Theories or hypotheses, without a foundation of uncontested facts, are of no value, and are merely trifling with the public intelligence. As regards the apportionment of blame, no conclusion is stated. Finally the failure of the Corporation to prevent the distribution of milk which they fully believed to be infectious shows how much was done to limit the outbreak or prevent its recurrence. We have had, on many occasions, to draw attention to serious flaws in Irish sanitary administration. The reports on the Clontarf outbreak go far to take away our last shreds of confidence.

### Forced Feeding.

THE knowledge that certain prisoners have been subjected to methods of forced feeding to prevent them injuring their health by voluntary starvation seems to have caused much disturbance to the public mind within the last few days. The sympathy expressed with those whose bodies have been thus "outraged," to quote Mrs. Pankhurst's term, is, of course, as far as physical suffering is concerned, quite wasted. The process of feeding by a nasal tube is, as every prison surgeon and asylum physician knows, quite simple, and entirely painless. The statement of one member of Parliament that "the last man treated that way died" is so grossly ignorant as to be ridiculous to those who know that every day of the year hundreds of "contumacious and weak-minded persons" are thus saved from the effects of their own folly. For our part, we have wondered why so old a prison dodge as refusing food should have been permitted to produce the desired effect in the case of a certain class of prisoners, while with others it was met by the usual safeguards, and we cannot regret that prison discipline is to be more equally administered in future.

### PERSONAL.

It is stated in a Reuter telegram that arrangements have been made by which King Edward will take part in the opening of the new Royal Edward Tuberculosis Institute in Montreal. His Majesty will press a button in Buckingham Palace in London, which, by electrical communication, will throw open the doors, turn on the lights, and hoist a flag on the building.

PROFESSOR SCHOLT, of Nauheim, will deliver the introductory address at the West London Post-Graduate College, on October 11th.

MR. CHARLES A. BALLANCE, M.V.O., yesterday delivered the inaugural address in the Arts Theatre of the University of Liverpool.

At Charing Cross Medical School, on Monday last, Viscount Ridley was unable to distribute the prizes, as had been arranged, and his place was taken by Sir T. Clifford Allbutt.

DR. THEODORE DAVIS, of Haslemere, Walton-in-Gordano, Clevedon, who died on August 11th, aged 75, left estate of the gross value of £17,213, with net personalty £16,178.

At the opening of the winter session at Guy's Hospital, on Friday last, of the medical school attached to that hospital, Sir Hector Cameron addressed the first autumn meeting of the Pupils' Physical Society on certain aspects of Lord Lister's antiseptic treatment as applied to abscesses.

SIR WILLIAM MACGREGOR, who sails on October 15th to take up his new duties as Governor of Queensland, was recently entertained at luncheon, with a distinguished company, by Sir Alfred Jones, K.C.M.G., Chairman of the Liverpool School of Tropical Medicine.

DR. THOMAS CRAWFORD HAYES, of Clarges Street, Mayfair, W., Emeritus Professor of Medicine at King's College, who died on April 5th, left estate of the gross value of £50,739 8s. 5d., of which the net personalty has been sworn at £48,765 7s. 3d. He left £100 to the King's College Hospital Building Fund.

INTERESTING presentations were made last week to Mr. Chas. Lakin, Mayor of Leicester, and to Dr. Robert W. W. Henry, from the blind people of the town, and the Council of the Wycliffe Society for Helping the Blind. They were in recognition of many years of honorary service to the institution mentioned, Mr. Lakin as physician, and Dr. Henry as ophthalmic surgeon.

MR. HENRY GORST, of Summerdale, Liverpool, surgeon, who died on June 19th, aged 54, left estate valued at £29,955 gross, with net personalty £28,177. He left £50 for distribution in the form of food, coal, and clothes amongst the poor of the district. He also stated:—"I forgive all debts due to me at the time of my death for professional services by persons whose net wages do not exceed 30s. per week."

ON the 1st October, Lord Justice Fletcher Moulton delivered an address at the opening of the winter session at the Leeds School of Medicine. The subject was "Some Thoughts on Causation in Health and Disease."

DR. G. A. GIBSON, of Edinburgh, has been offered, and has accepted, the honorary degree of D.Sc., Harvard University, and has sailed for America to receive it.

IN giving judgment in a recent case at Clerkenwell County Court, London, Judge Edge said that in cases where the question was purely one of medical evidence, it would be much better if, instead of bringing the matter before a judge in court, a rota of leading medical and surgical practitioners in London were formed by the authority of the Home Secretary. Then, in cases of that sort, the medical men on each side could agree upon some member of the rota who should examine the patient in the presence of the medical men on both sides, and whose report to the Court should be taken as conclusive.

# A CLINICAL LECTURE

## ON

### CANCER OF THE TONGUE. (a)

By R. ATKINSON STONEY, F.R.C.S.I.,

Visiting Surgeon to the Royal City of Dublin Hospital.

THE subject for consideration this morning is cancer of the tongue, with particular reference to those cases where the disease starts on the side of the tongue and involves the floor of the mouth at an early stage. Here is a case in point:—

CASE I.—The patient, a man, æt. 60, first noticed a sore under the tip of the tongue about six months ago; it was not very painful. After a short time he showed it to a doctor, who advised him to have it removed. However, he did not take his advice, and only came to hospital a few days ago. On looking into the mouth, it is seen that the tongue is bound down to the floor of the mouth and cannot be protruded, an ulcerated surface is seen between the tongue and the back of the symphysis, and on tilting back the tip of the tongue this ulcer is seen to cover the under surface of the tongue, the floor of the mouth, and the muco-periosteum on the back of the jaw right up to the level of the teeth; it extends from the left lateral incisor to the second right bicuspid; the edges are everted, thickened, and hard; the ulcer bleeds readily, and there is an offensive smell from it. Let us now examine for enlarged glands. These can be both seen and felt in the middle line under the symphysis, and in both submaxillary regions, those on the right side being very large and hard. None can be felt below the level of the hyoid bone on either side. When examining for enlarged glands, it is most important that the tissues of the neck should be relaxed. The best method is to seat the patient in a chair, and, standing behind him, make him bend the head slightly forward, and then palpate the neck with one hand on either side. Owing to the fixity of the tongue and pain, the patient has great difficulty in taking nourishment, and, as you notice, his speech is very indistinct. This is not a very suitable case for operation. First of all, though the patient says he is only sixty, he looks at least seventy, and is evidently in a feeble condition. Secondly, the extensive involvement of the floor of the mouth and the back of the jaw will necessitate an extensive operation, probably including a removal of a portion of the bone; it will certainly require a division of the bone in order to allow of free access to the disease. Thirdly, the glands are affected to a considerable extent on both sides, though the fact that none can be felt below the submaxillary triangles is a point in his favour. In spite of these objections, however, operation should be advised owing to the great pain and disability that the patient suffers, and the fact that, if not operated on, the difficulty in taking nourishment, and the constant swallowing of septic material from the mouth must lead to rapid wasting and an early fatal result.

I will now show you two other cases of a somewhat similar character that have been operated on.

CASE II.—J. L., a man, æt. 45, was admitted to this hospital in September, 1907. He had an ulcer on the right side of the tongue and floor of the mouth; he had noticed it first some three months before I saw him. The ulcer did not extend to the middle line, and did not involve the muco-periosteum of the jaw; glands were palpable in the right submaxillary triangle. The operation performed was one which I shall describe more fully presently; glands were

found crossing the middle line below the symphysis, and both submaxillary triangles were completely cleared; the jaw was divided just to the right of the symphysis, and about two-thirds of the anterior portion of the tongue and the right side of the floor of the mouth were removed. The patient recovered rapidly, and left the hospital in about three weeks, the wound in the neck healing by first intention. There was considerable delay, however, in the union of the jaw, which was wired at the close of the operation. In July, 1908, he was seen again, and showed a recurrence which involved the stump of the tongue, the back of the symphysis, and the intervening part of the floor of the mouth. This time, the central portion of the lower jaw from the second molar on the right side to the first molar on the left was removed in one piece with the floor of the mouth and the remains of the tongue. Again he healed up rapidly, and left hospital in less than three weeks. He returned in November last with a small hard ulcer on the mucous membrane covering the left side of the jaw. This was found to be adherent to the bone, so a third operation was performed, and the whole of the left half of the jaw was removed. At the same time, a gland which was felt close to the bifurcation of the left carotid was removed and examined, but it showed no trace of malignancy. The patient was out of bed on the fourth day and left hospital at the end of a fortnight. You can see for yourselves that now he shows no sign of disease in the mouth and there are no glands to be felt in the neck. He can take his food well, can do a good day's work, and can speak fairly distinctly.

CASE III.—J. C., a man, æt. 47, was admitted last December with a large malignant ulcer on the right side of the tongue and floor of the mouth, involving the muco-periosteum of the right side of the jaw, and extending back almost to the anterior pillar of the fauces and forwards to within about half an inch of the middle line. Enlarged glands could be felt in the right submaxillary space, but not in the left. The patient had noticed the sore for nearly four months. The right submaxillary triangle was cleared out, the jaw was divided at the symphysis, and the anterior part of the tongue on both sides and on the right side the posterior part to behind the anterior pillar of the fauces, was removed, with the right side of the floor of the mouth, and all the muco-periosteum from the inner aspect of the right side of the body of the mandible. When the jaw was divided and the two sides separated, this muco-periosteum on the right side stripped up off the bone leaving it quite bare. I was afraid that this would lead to necrosis of the bone, and, in order to try and prevent this, I stitched the mucous membrane of the remains of the tongue over the bone to the muco-periosteum on its outer surface. The wound in the neck healed rapidly except for a small sinus which discharged for some months till a spicule of bone came away; after this it healed, and the two halves of the jaw which had been wired became firmly united about four months after the operation. There is now no sign of disease, and the only complaint is that saliva runs from the mouth when the patient stoops; this is probably due to the fixation of the tongue, the result of stitching the mucous membrane to the muco-periosteum on the outside of the jaw, but is a trifling disadvantage compared to the gain of saving the right half of the

(a) Delivered to the Post-Graduate Class of the Royal College of Surgeons of Ireland, at the Royal City of Dublin Hospital, on June 25th, 1909.

jaw. The patient can speak well, and has returned to work.

The only operation which I consider suitable to these cases of extensive cancer involving the floor of the mouth, is one in which the jaw is divided and the two halves separated. It commonly goes by the name of Sédillot's operation. I perform it as follows:—An incision is made from the symphysis in a curved direction down to the greater cornu of the hyoid bone and then up to the angle of the jaw, the skin and platysma are reflected upwards in a flap and the whole of the contents of the submaxillary space are removed from below upwards in one mass, including the submaxillary gland. It is most important that this gland should always be removed, as it is so intimately associated with the lymphatic glands that it is impossible to be sure of having removed all the latter if the submaxillary salivary gland is left behind. The facial vessels are divided between ligatures at the commencement of the dissection and the lingual is usually tied at the same time. If glands are palpable on both sides or if the primary disease in the mouth encroaches on the middle line, this dissection must be carried out on both sides. After ligature of all bleeding points the wound in the neck is packed with iodoform gauze and the second stage of the operation is now commenced. The lower lip is divided in the middle line down to the commencement of the incision in the neck, and the lower jaw is sawn close to or through the symphysis, the two halves are separated and held apart, and the diseased portion of the tongue and the floor of the mouth are removed with a wide margin of healthy tissue, at least half an inch. In this way the primary disease in the mouth and the secondary disease in the neck and the intervening tissues are removed in one continuous mass without cutting into them, and the operation corresponds to that which is now recognised as the ordinary procedure for cancer of the breast, or, indeed, for cancer in any part of the body. As much of the tongue and floor of the mouth can be removed as is deemed advisable, even the base of the tongue down to the hyoid bone, if necessary. The mucous membrane of the remains of the tongue is now stitched to the muco-periosteum of the jaw so as to shut off the mouth cavity from the wound in the neck; the two halves of the jaw are drilled and united by wire, and the skin incisions closed after removal of the gauze packing from the neck. A small opening is left under the angle of the jaw on one or both sides with an untied suture, through this opening a small gauze drain passes into the submaxillary space; this drain is removed at the end of 24 or 48 hours, and the suture tied if there is not much discharge. In this way the wound in the neck will usually heal by first intention. If the glands in the neck below the submaxillary triangles are involved they must also be removed at the commencement of the operation, by an extension of the skin incision vertically downwards from the greater cornu of the hyoid bone. This is undoubtedly an extensive operation and takes a considerable time, especially if both sides of the neck require to be done, but it is accompanied by surprisingly little shock, as a rule, and there is very little blood lost if the dissection is carried out as described from below upwards. This is the operation which was performed on the two cases you saw this morning and which I intend performing on the first case you saw. Those of you who care to do so can see it done after this lecture. This is very similar to the operation described by Mr. C. P. Childe in the *British Medical Journal* for January 2nd, 1909, except that he, like many others, advises that it should be divided into two stages separated by an interval of days or weeks. The advantages claimed for doing the operation in two stages are that the shock is less and the danger of infecting the large wound in the neck is removed. The disadvantages are that it involves two major operations instead of one, and it is often difficult, if not impossible, to get patients to agree to this; also it prevents the primary and secondary disease, and the intermediate infected tissue being removed in one continuous mass,

and it necessitates the cutting into infected lymphatics, and therefore probably increases the dangers of recurrence. The shock, as I have already said, is not usually marked in these cases, and may be guarded against by saline infusion, either during or immediately after the operation. The danger of septic infection of the wound in the neck can be largely prevented by the precautions indicated above, i.e., packing the neck wound during the later stage of the operation and forming a new floor to the mouth.

There are numerous dangers in any operation performed for the removal of extensive malignant disease of the mouth. The following are the most important:—

1. *Suffocation from blood getting into the larynx and trouble with the anæsthetic.*—In order to obviate these dangers and difficulties it has been proposed to perform a preliminary tracheotomy, either at the commencement of the operation or a few days before, and then plug the pharynx and administer the anæsthetic through the tracheotomy tube. This necessitates an extra operation or adds to what is already a very extensive procedure; it has been said that the mortality with tracheotomy is greater than without it, but this is only natural, as it is reserved for the worst cases. Instead of this it has more recently been advised to commence the operation with a preliminary laryngotomy. This is much better than a tracheotomy as it only requires a minute or two to perform it, but it is unnecessary, I think, where the above described operation is done, for in the early stages of this operation there is no interference with the anæsthetist, and when the disease in the mouth is attacked, owing to the division and separation of the two halves of the jaw, any blood which is shed tends to escape forward, and by placing a small sponge far back in each side of the mouth and administering chloroform with a Junker's inhaler there is no trouble either with the anæsthetic or with blood getting into the pharynx.

2. *Shock.*—This has already been considered. If owing to the condition of the patient, it is thought that shock is likely to be excessive, then the operation must be done in two stages. The removal of the glands should be undertaken first, as by this means the lingual and facial arteries can be tied, greatly lessening the loss of blood in the final operation; and also on account of the fact that if the removal of the tongue is undertaken first the patient may refuse to have the glands removed afterwards.

3. *Hæmorrhage.*—This may be primary or secondary. The hæmorrhage during the operation is slight, as the main vessels are secured during the early stage of the operation, and in the later stages the access to the mouth is so free that there is no difficulty in clipping any vessel which may bleed. Secondary, hæmorrhage is mainly a matter of sepsis, and as healing, specially of the neck wound is usually rapid, there is little danger of its occurrence. It has been suggested that a preliminary course of calcium chloride or lactate should be given, but this is hardly necessary.

4. *Sepsis.*—This may be largely prevented by care in checking all hæmorrhage in the neck and plugging it with iodoform gauze before the mouth cavity is opened, and at the end of the operation shutting off the neck wound by forming a new floor to the mouth. If this is done, as in the two cases I showed you, the wound in the neck heals up almost, if not entirely, *per primam*. Much can be done also by careful cleansing of the mouth and teeth before operation, with antiseptic mouth washes, the free use of a toothbrush (specially in the case of hospital patients) and the frequent use of lozenges containing some preparation of formalin (formamint lozenges are excellent) for several days or a week before operation. The use of these lozenges is the best means of keeping the mouth clean after operation and they are most pleasing to the patient, who readily sucks them when the mouth is too sore to allow of its being rinsed out with any comfort. It has been recommended that the patient's resistance to the action of the pyogenic organisms should be increased by in-

jections of anti-streptococcic and anti-staphylococcic serum for some days before and after the operation.

5. *Septic or Inhalation Pneumonia*.—This is probably the most serious danger in these cases, and the most difficult to guard against. It is claimed by the advocates of a preliminary laryngotomy or tracheotomy that by this means the danger of septic pneumonia is prevented, but this is only so if the tube is worn for several days, and even this precaution will not necessarily prevent its onset. It may be caused by the entrance of septic matter, blood or food into the larynx, either during the operation or at a later date. I have already explained how that in the operation described above there is practically no danger of the entrance of any foreign substance into the larynx during the operation. The likelihood of its occurring afterwards increases in direct proportion to the amount of the tongue which has been removed, owing to the part which is left being too small to cover the entrance of the larynx during the act of swallowing. But even in cases where the removal of the tongue very far back is necessary, the danger may be largely overcome by careful preliminary cleansing of the mouth, by getting the patient to sit up in bed, and even to get out of bed as soon as possible after the operation. The patient may be propped up after twenty-four hours, and may, in many cases, be got out of bed on the third or fourth day. All food by the mouth should be withheld for the first twenty-four hours, the patient being fed by the rectum. After this the patient should sit up when taking nourishment, or if not able to do so, a feeder with a rubber tube passed to the back of the pharynx should be used. A stimulating expectorant may be given with advantage, and the patient encouraged to cough and spit out any discharges which may collect in the mouth.

6. Another danger which is described, and which sometimes causes a sudden fatality after a successful operation, is suffocation from the slipping back of the stump of the tongue over the entrance of the larynx. This, of course, cannot occur when the remains of the tongue is stitched to the muco-periosteum of the jaw as advised. In cases, however, where the stump is very small and this cannot be done, a thick silk ligature should be passed through it and brought out of the mouth and fastened either with a piece of strapping to the cheek or tied round the ear, this should be retained for the first four or five days at least till the tongue has formed adhesions which will prevent its sudden falling back.

The results of operation for the cure of cancer of the tongue are not good, the disease recurring either locally or in the glands of the neck in a large number of cases. Why is this? Chiefly because the cases are not operated on in a sufficiently early stage. Whose fault is this, is it the fault of the patient or the doctor? When one considers the inconvenience caused by such a little thing as a blister on the tongue, it is hard to imagine that a patient can have an ulcer on his tongue for any length of time without being fully aware of it, and though exceptionally a patient will continue to endure the unpleasantness, if not worse, that it causes for a long time before showing it to a doctor, yet in the majority of cases it is seen by a doctor in the early stages. Why then is its removal not advised at once? The usual excuse is, that the diagnosis is not certain, and much valuable time is lost in coming to a decision that the disease is cancer. If an ulcer appears on the tongue of an elderly patient, especially a man, even if there is an apparent cause for it, as the irritation of a ragged tooth, the probability is that it is cancer or will develop into cancer. Therefore the rule should be that if an ulcer of the tongue in such a patient does not rapidly heal (not merely get better) under ordinary or specific treatment, either a portion of it should be removed for microscopic examination (this can be done easily and painlessly with a local anæsthetic), or the disease should be considered malignant and freely removed. The teaching which students receive and what they read in their surgical text-books is largely responsible for the failure to diagnose these cases early, as the descriptions

usually given of cancer of the tongue and, indeed, of cancer elsewhere in the body is generally that of a case in an advanced stage, thick everted edges, fixation of the tongue, difficulty in speaking and swallowing, enlargement of glands, cachexia, etc. This is not the stage in which to diagnose cancer, anybody could do this. Your rule should be *never be satisfied unless you have made a definite diagnosis of the presence or absence of malignancy within three weeks of your first seeing the disease*, and if this is within three weeks of its first appearance, so much the better. If this rule were adhered to most cases of cancer of the tongue would be operated on while still small and confined to the tongue, and could be removed from within the mouth without any extensive operation, and one would not meet so many cases which had advanced to the truly appalling stage of the one I showed you this morning. A partial removal would in most cases suffice, the cut edges of the tongue could be stitched together and the inconvenience would be almost unnoticeable, the mortality of the operation would be infinitesimal and the chance of recurrence would be slight.

Lastly, is it advisable to operate in advanced cases where the glandular involvement is considerable? Yes. Some of these cases recover in a marvellous manner and live for many years free from any recurrence. Though the mortality of the operation is high, these patients, if left to themselves, suffer very severely and a fatal result must come, usually rapidly. Even where it is impossible to remove all the glands it is yet advisable to remove the disease in the mouth, as this relieves the patient of most of his pain and discomfort, and allows him to take his food and die at a later date in comparative comfort.

NOTE.—A Clinical Lecture by a well-known teacher appears in each number of this journal. The lecture for next week will be by J. Stewart Fowler, M.D.Ed., F.R.C.P., Physician to the Royal Hospital for Sick Children, Edinburgh. Subject: "Dechlorination in the Treatment of Chronic Bright's Disease."

## ORIGINAL PAPERS.

### QUACKS FALSE REMEDIES AND THE PUBLIC HEALTH.

By DAVID WALSH, M.D.ED.,

Senior Physician, Western Skin Hospital; Physician, Kensington and Fulham General Hospitals.

#### PART II.

#### BLOOD MIXTURES AND PURIFIERS.

THE stock active ingredient in the majority of these so-called purifiers is iodide of potassium, a valuable drug extensively used in medical practice. Its indiscriminate use, however, is attended by certain risks, especially in persons who are specially susceptible to its action. Thus it sometimes sets up a rash on the skin, which, if improperly treated, or if the action of the drug be continued, may lead to serious or even fatal results. Every physician of experience in skin practice knows of eruptions due to taking blood mixtures. In some instances the unhappy sufferer imagines that the medicine is "bringing out" the disease, and goes on increasing the dose. In any event, it is impossible to justify even remotely the extravagant claims of the vendors of these blood mixtures.

Thus, in a reproduction of Clarke's Blood Mixture in the "Australian Report" (p. 165), occur the specific statements:—"Blotches, spots, pimples, blackheads, and sores of all kinds can be cured by taking Clarke's Blood Mixture, the world-famed blood purifier. This famous medicine will also cure all skin and blood diseases, such as eczema, scrofula, scurvy, ulcerated sores, etc." So far as the curative effect of iodide of potassium upon skin diseases is concerned, it may be briefly stated that its curative effect on skin maladies is extremely limited, and that the vast majority of affections of that kind are either unaffected by potas-

sium iodide or are aggravated and made worse by it. From the appended analysis there is no other ingredient in Clarke's Blood Mixture that could conceivably exercise any therapeutic influence over the skin. Under these circumstances, any justification of the statements above quoted from the advertisement would be difficult, or altogether impossible. Indeed, in cases where the well-known "iodide rash" follows the use of a remedy shown to contain iodide of potassium, there should be little difficulty in substantiating a claim for damages on the part of the sufferer.

The composition of the active ingredients of Clarke's Blood Mixture is given by Dr. Robert Hutchison approximately as iodide of potassium (about 6 grains to the ounce) ("Australasian Report," p. 190).

The British Medical Association analysis is:—

Potassium iodide, 52.5 grains.  
Spirit of sal volatile, 10 minims.  
Spirit of chloroform, 67 minims.  
Simple syrup, 50 minims.  
Burnt sugar, q.s.  
Water to 8 fluid ounces.

"The estimated cost of the ingredients is 1½d." (The bottle is sold at 2s. 6d.)

Harvey's Blood Pills, according to the same authority (p. 45, "Secret Remedies") are made up approximately as follows:—

Quinine sulphate, 17 grains.  
Potassium iodide, 22 grains.  
Powdered rhubarb, 16 grains.  
Powdered liquorice, 8 grains.  
Ext. of sarsaparilla, 12 grains.  
Ext. of burdock, 12 grains.  
Ext. of taraxacum, 12 grains.

Divided into 36 pills.

The reproduction of the accompanying circular states:—

"Harvey's Blood Pills for Skin Diseases. An Unfailing Remedy for Scurvy Sores! Harvey's Blood Pills for Scrofulous Sores. A Certain Remedy for Ulcerated Legs! Harvey's Blood Pills for Sluggish Liver. The Surest Remedy for Ringworm! Harvey's Blood Pills for Erysipelas. The Quickest Remedy for Itch! Harvey's Blood Pills for Boils. An Effective Remedy for Eruptions! Harvey's Blood Pills for Rheumatism. The Safest Remedy for Piles."

Of this farrago of nonsense it may be stated that the ingredients shown in the analysis could, neither alone nor combined, exert any curative influence upon ringworm or itch. Any person, therefore, purchasing the pills for the cure of either complaint, and remaining uncured, would have a ground for action for failure of contract. As to the pills being an efficient remedy for eruptions, it need only be stated that the study of skin diseases embraces an immense variety of conditions that demand prolonged study and special training to grasp at all adequately. In many conditions the cure of skin diseases is tedious, and in some hopeless. Moreover, the use of two at least of the ingredients of the pills might create, and possibly aggravate and intensify certain skin eruptions.

It needs little beyond these simple statements to prove that the claims set forth in the above-quoted advertisement are preposterously false. Yet they are issued to the public under the cloak of a Government stamp, which to the ignorant purchaser is a sort of guarantee of the genuineness of the wares thus distinguished. Why should the trade in secret remedies alone be permitted to press and advertise claims that will not stand the test of ordinary commonsense examination as to their genuineness? If a man professes to cure diseases and to sell remedies for that purpose, should he not be called upon to justify his statements and forced to adhere to the terms of the contract entered into with his customer on the direct assertions of his advertisement? Lastly, what is to be said of the editor who admits such an advertisement to his columns?

Dr. Squire Sprigge, Editor of the *Lancet*, has spoken with no uncertain voice on the last mentioned point.

SQUIRE SPRIGGE ON NEWSPAPER AND QUACK ADVERTISEMENTS.

"A newspaper editor," he writes, "or manager may be

pardoned if he thinks that the use of his columns to make a nostrum known is a legitimate branch of newspaper business (a), especially when it is remembered that if he took the opposite view the proprietor of the newspaper might be willing to hear of his resignation. But while this is true with regard to some advertisements, it is not those of others, and the disgusting advertisements of many modern quacks ought to be tolerated by no self-respecting editor, manager, or proprietor. Yet no falsehood is too shameless, no promise too palpable a trap, to be refused currency in the advertisement columns of the best-known journals, and it is noteworthy that among the worst offenders in this respect are newspapers and magazines which enjoy with certain classes of the community a high reputation for accuracy and *bond fides*."

Munyon's Homœopathic Home Remedy Company, an American company with an office in London, sells a cure which claims to eradicate all impurities from the blood, and, amongst other things, "any form of unhealthy, blotchy, pimply, or scaly skin." The British Medical Association found a bottle to contain 200 pellets or pilules, consisting of sugar. No other medication was present. To sell sugar to cure impurities of the blood and scaly skin is a transaction which would, in any other branch of trade, be stigmatised by Anglo-Saxon terms of a simple and direct kind. Would the British Government, which permits America to dump this sort of rubbish on our shores, permit sugar to be sold for the cure of the ailments of sheep, cattle, or pigs? Any member who asked such a question in the House of Commons would become an object of ridicule. Yet sugar may be sold under the shield of a Government stamp for the cure of diseases in men, women, and children. A more absurd position it would puzzle the caustic wit of Swift or of Voltaire to devise.

A Blood Purifier sold by "Professor" O. Phelps Brown was found by the same authority to contain 15 per cent. of sugar, a good deal of mucilage, 25 per cent. of alcohol by volume, and of vegetable and other substances difficult to identify, but of little or no therapeutic value. Yet this secret remedy is advertised as "an infallible remedy for all diseases of the blood, be they constitutional, hereditary, or of recent contraction." It further states that "ulcers, tumours, scrofula bunches, fistula, piles, painful eruptions—indeed, all affections manifested upon the outer surface of the body are the consequences of diseased blood." From the medical point of view this is nonsense that is beneath contempt, but it becomes pernicious and harmful when it is advertised with the object of inducing the public to purchase a worthless nostrum. That the Government stamp should be affixed to claims of this kind is a standing disgrace to our nation.

#### CURE-ALLS.

The above heading was aptly framed by the British Medical Association to include proprietary medicines claiming to cure a wide range of maladies. Dr. Williams' Pink Pills for Pale People may be taken as an example. The following extract from an advertisement is quoted in the Association book (p. 174):—

"THE DR. WILLIAMS' WAY.

"When the muscles and nerves are tortured by poisons in the blood as the result of rheumatism, sciatica, or lumbago, the only way to a cure is to enrich and purify the blood. Dr. Williams' Pink Pills, in this way alone, have cured not only rheumatism, but anæmia, indigestion, palpitations, influenza's after-effects, eczema, sciatica, St. Vitus' dance, spinal weakness, the many forms of nervous disorders dreaded by men; also the special ailments of women."

The drug that effects these marvels is shown by the British Medical Association analysis to be "practically the ordinary iron-carbonate commonly called Bland's pill, which ought to be freshly made." The pills are sold at 2s. 6d. per box of 30, or a penny apiece, whereas Bland's can be bought wholesale for about 1s. or 1s. 3d. per gross, or in bulk at a much lower price.

(2) "Medicine and the Public," p. 71.



The Pink Pills were originally made by George Taylor Fulford, a small country chemist in Ontario, Canada. The "Australian Report" (p. 199) says that Charles Fulford, nephew and Australian representative, admitted upon oath in a Melbourne court, "There is no such person as Dr. Williams." Paragraph 741 states that Fulford became a Senator of Canada, died in the odour of sanctity, received a public funeral, and left five millions of dollars." "This fortune was amassed by selling a well-known cheap and ordinary drug under a fictitious name at scores of times its actual money value by means of claims absolutely unsupportable." The Pink Pills may be dismissed with the simple addition of the Australian official comment (§740):—"New blood can be made from foods only, and not from arsenic, potash, or sulphate or carbonate of iron. The business is plunder from first to last, mendacity, audacity, and altogether heartless exploitation of the poor and suffering, with the indispensable assistance of newspapers."

The genius of the Fulford family evolved two other patent medicines that have gained enormous publicity, namely, Zam-buk and Bile Beans.

In the Court of Session, Edinburgh, July 20th, 1906, an action was brought by the proprietors of Bile Beans to prevent a chemist from selling, under the name of "Bile Beans," any pills not supplied by the complainers.

"Lord Ardwell, in the Outer House, had refused the note, and found the respondent entitled to expenses, on the ground that the business of the petitioners was one founded entirely upon fraud, impudence, and advertisement" ("Australian Report," p. 195, § 725).

The Lord Justice Clerk, who delivered judgment, spoke in terms perhaps as deliberately scathing as any ever used in a British Court of Law. (a) "The evidence in this case," he said, "discloses the history of a gigantic and too successful fraud. The two complainers, who ask an interdict against others, do so to protect a business which they have brought to enormous proportions by a course of lying which has been persisted in for years. The scheme they formed was to delude the public into the belief that a valuable discovery had been made of a medical remedy hitherto known only to certain savage tribes in a distant part of the world, but known to them for ages, and that the medicine had been prepared by the aid of 'the implements of modern scientific research,' and that the best laboratories and the most modern plant had been requisitioned for compounding the wonderful Australian vegetable substance. The place of the discovery, the mode of discovery, the discovery itself, the instruments of research, the laboratories, were all deliberate inventions, without any foundation in fact. The story was that a certain Charles Forde, who was declared to be a skilled scientist, had, while in Australia, noted the fact that the Aborigines were markedly free from certain bodily ailments, and that, by patient research and exhaustive investigation, he had ascertained that this immunity was obtained by the use of a natural vegetable substance whose properties for cure of such ailments was extraordinary, and that, as the result of his research, this wonderful remedy was now given to the world. All this was in every particular undiluted falsehood. There was no such person as Charles Forde; no eminent scientist had been engaged in researches; no one had gone to Australia and learned of a time-proved native cure. The truth was that the complainers had formed a scheme to palm off upon the public a medicine obtained from drug manufacturers in America as being the embodiment of the imaginary Australian eminent scientist, Charles Forde. Accordingly, having got their supplies from the American drug dealer, they proceeded to create a public demand by flooding this country and other countries with advertisements in the Press, and by placards, and leaflets, and pamphlets, in which the lying tale was repeated, often embellished with pictorial advertisements of the healthy savage, and with pictures of the imaginary scientist, duly bearded and begoggled, having the precious root pointed out to him by the Australian native. It was of importance in exploiting a fraud of this kind to get a catching name, and the only trace of discovery in the whole proceed-

ings was that the complainer Fulford thought out the alliterative name of Bile Beans for Biliousness. . . . I agree with the Lord Ordinary in holding that the complainers being engaged in perpetrating a deliberate fraud upon the public in describing and selling an article as being what it is not, cannot be listened to when they apply to a Court of Justice for protection. It is their own case, as brought out in evidence, which stamps their whole business with falsity."

Zam-buk may be dismissed shortly. It is an ointment which claims to be "unequalled" in fifty or sixty widely different ailments. Amongst them are itch and ringworm, but if the composition of the ointment be that found by the analyst of the British Medical Association, it could not conceivably cure either affection. The British Medical Association publishes the following analysis (a):—

Oil of eucalyptine, 14 per cent. (approximately).

Pale resin (colophony), 20 per cent. (approximately).

Soft paraffin, 55 per cent. (approximately).

Hard paraffin, 11 per cent. (approximately).

Green colouring matter, a trace.

A vast number of secret remedies remain, but enough has been said to illustrate the main conclusions that the claims made for these preparations are in most cases extravagant, and directly opposed to medical knowledge and experience. Further facts regarding them can be found in profusion in the books which have been so frequently quoted. At the same time it may be useful to discuss briefly the outstanding features of certain groups of these secret remedies.

#### CONSUMPTION CURES.

There is no specific drug cure of consumption, a scientific fact that alone disposes of the many cures which are sold for the cure of that disease. Certainly none of the drugs contained in the various British Medical Association analyses could have any such effect. In the case of some of the emulsions sold by respectable firms under a proprietary name, some of them are undoubtedly useful in the treatment of consumption. If the proprietors were content with that statement, there could be little objection to the sale of their preparations without appended formula. When, however, they go beyond that, and claim to cure consumption by the use of their emulsion, their claim at once becomes unsupportable, and they are selling their wares under misrepresentations that are misleading to the public. Some of the "cures" for which high prices were charged have been shown to depend on ipecacuanha, opium, glycerine, krameria, bromide of potassium, and other substances that could not by any possibility bring about any such effect. Several of them contain 20 to 25 per cent. of alcohol—that is to say, the medicine consists of a stiff dose of spirits and water, which doubtless helps the unfortunate consumptive who takes it to feel a little better while under its stimulating influence. In discussing this class of remedies, the "Australian Report" (p. 157, § 586) quotes the following pithy comments from the *Sydney Bulletin*, February 28th, 1907, upon a contemporary trial, in which the defendant was acquitted upon the ground that "he probably believed—at least, there was no possibility of proving that he did not believe—the statements that he issued about" the secret remedy concerned. The *Bulletin*, brushing aside all legal cobwebs, says of this:—"Only an utterly heartless wretch would delude miserable and often impoverished consumptives into spending pounds on alleged remedies unless he knew, as a matter of expert personal knowledge, that the article he sold was specific. A plea that he had never received any medical training, and so was only taking the money of the consumptives at random, should be good in itself for a long term of gaol."

It has been known that the names and addresses of persons who apply to advertisers of unqualified treatment and of secret remedies are hawked about as a valuable stock-in-trade. That fact was alluded to several times in the "Australian Report," and in one case a chemist reported his indignant rejection of the suggestion by an advertising firm that he should disclose to them the names of any of his clients whom he knew to be suffering from diabetes.

(a) "Australian Report," §726.

(a) "Secret Remedies," p. 122.

## FEMALE COMPLAINTS.

Under pretence of providing remedies for female irregularities, all kinds of dangerous drugs are administered. There can be no doubt that an abortifacient action is suggested in many of these advertisements. Such a result is not obtainable by drugs except by chance action, and then only by the injury of the health of the unfortunate woman who takes them to such an extent that she runs a risk of death. When death follows, its cause is probably, as a rule, unsuspected. Women who apply to advertisers of this kind run the risk of subsequent blackmailing. In one case not many years ago in London, extensive blackmailing of that kind was discovered by the police. Although the more respectable newspapers have been purged of this particularly obnoxious class of advertisement, they are inserted to a disgraceful extent in smaller journals, perhaps more especially in a certain type of Sunday newspaper, and, sad to say, in the religious journals, which, for some reason or other, have always been a favourite medium for gross quackery of every description.

Whatever views the Home Office and the police may take with regard to the desirability of interference with ordinary trade in secret remedies, there can surely be little difficulty with regard to the veiled solicitation of the class of advertisement under notice. No man of the world with a fair general experience of affairs would be in a moment's doubt as to the inner meaning of an advertisement of the kind. As newspaper editors, police inspectors, and leading political administrators are necessarily men of the world, with large experience of social affairs, it follows they know the nature of such documents. What defence, then, can there be for editors who admit such matter to their columns, or for police or Home Office authorities that permit the public morality to be outraged by such publication?

## REMEDIES FOR EPILEPSY, FITS, AND NERVOUS DISORDERS.

A flourishing trade is done in the sale of bromide of potassium for the cure of epilepsy. As a matter of fact, the drug in question does not cure that malady, nor, indeed, is any specific cure known to scientific medicine. Bromide of potassium, however, is used by medical men generally to control the malady. There is no special virtue in the solutions sold by the proprietary medicine vendors, while they charge extravagant prices—say, as much as twenty or thirty times the cost of the ingredients. In the few cases in which bromides are not used, the substituted drugs revealed by analysis are not such as would exercise any beneficial effect upon epilepsy.

## CURES FOR INEBRIETY.

This class of cure furnishes a lucrative field to the adventurer. A favourite plan is to sell a powerful narcotic, whereby one craving is substituted for another—acetanilide, bromide of potassium, atropine, and other powerful alkaloids. Many persons addicted to drink can abstain for a time at will, and improve under the mere abstinence which is a feature in nearly all drink cures. It is impossible, therefore, to accept the assertion that persons have been cured thereby. Moreover, a prolonged period of time must elapse for the establishment of an actual "cure." In one case that came under the author's notice, a patient and his friends congratulated themselves upon the good results of a notorious American method of treatment. Their glowing thanks were no doubt carefully enrolled amongst the firm's testimonials. For all that, the unfortunate patient died a year or two later from the effects of drink.

## CANCER REMEDIES.

At the present moment the utmost resources of medical science are concentrated upon the investigation of cancer. In spite of the enormous mass of skilled labour that has been brought to bear upon this subject, the cause and the medicinal cure of cancer are alike unknown. The only hope to the sufferer lies in the early recognition of the disease by a skilled medical investigation, and its early and complete removal by the surgeon. In the face of this dispassionate statement, it is clear that secret remedies which delay

medical advice and surgical operation simply deprive the unfortunate sufferer from cancer of his only chance of recovery. More than that, analysis shows the remedies thus given internally to be inert or worthless. In the case of a famous foreign quack years ago, analysis showed his electrical fluids of various colours to be water, pure and simple. When the remedy is for external application, the case is infinitely worse, for the sufferer is often put to extreme and long-continued agony by the use of caustics that cannot cure. By the use of modern methods the last days of the unfortunate sufferer from malignant disease can be robbed of a great amount of suffering, but in the hands of the quack the elements of pain and of septic poisoning, with its harrowing accompaniments, run their dire course unchecked. Yet colliers, ploughmen, herbalists, and others are permitted by law to carry on the terrible trade of "cancer-curing" without let or hindrance. Of what standard is the collective wisdom of a State that permits cruelties of this kind to be inflicted upon her weak and credulous citizens that she would not for a moment allow to be practised upon her pigs or cattle? A man who pretends to treat dogs without a veterinary qualification is instantly prosecuted and fined by the authorities, but there is nothing to prevent him making a good thing by transferring his attention to his fellow-creatures. If he has a good address and can start in a fashionable quarter of a big town, his success would be assured.

## OTHER CURES.

The cures for deafness cover a large field of enterprise. They are usually obtained direct from the nostrum vendor, and consist of glycerine and other ingredients that could not exercise any beneficial influence upon nerve deafness. As a rule they are sold in connection with some mechanical appliance.

Another class of injurious remedies are those sold for eye diseases. Thus, Singleton's Eye Ointment (a) is advertised as "an absolute specific for all eye troubles and diseases." The same authority gives its chief ingredient to be red mercuric oxide, a drug recognised and used by ophthalmic surgeons, but absolutely unfitted for a vast number of the many maladies to which the human eye is subject. In some affections of the kind instant skilled treatment is necessary in order to prevent irreparable injury to the sight, and it is painful to reflect how much injury is inflicted upon the community who resort to the indiscriminate use of advertised remedies.

Remedies for blindness form another class of heartless and injurious secret remedies. Needless to say, blindness is the result of conditions that, in the vast majority of cases, cannot be benefited by drugs, whether internally or externally administered. When an unskilled person advertises his power to cure blindness, he should surely be held legally responsible for advancing that claim. The ignorance of the facts of the case involved in so preposterous a claim furnishes in itself damning proof of his incompetence.

(To be continued.)

## THE ADDENDUM PRANDII AND PROFESSIONAL EDUCATION. (b)

By J. SIM WALLACE, D.Sc., M.D., L.D.S.

MOST of us must often have wondered why it is that so many members of the medical profession seem to take so little interest in the hygiene of the mouth. For the mouth is admittedly the great entrance-portal of disease. The natural self-cleansing processes of the mouth are, as a rule, unknown to them, and, instead of aiding these self-cleansing processes, they very frequently advocate procedures which would really appear to have been deliberately invented to ruin the physiological perfection of the mouth at the earliest possible age. We, of course, as dentists, see what actually takes place, and are painfully aware of the havoc wrought in children's mouths and teeth at

(a) See "Secret Remedies," p. 142.

(b) Paper read before the Annual General Meeting of the British Dental Association at Birmingham, 1909.

or even before the age of six. It has been shown that in some towns in England where accurate statistics have been taken each child has on the average about nine carious teeth at this age. It is not possible to say that this results from disobeying the dictates of the medical profession, for it is common knowledge that children brought up most carefully according to the *régime* advocated by the highest authorities in the medical profession have their teeth equally carious, as a rule, at an even earlier age than those children who have but little care bestowed upon them and who are allowed to do and eat pretty much what they like. Is it not enough to recognise that the system currently advocated will eventuate in the destruction of the teeth, and then blame fate or the depravity of the human constitution? Nor is it sufficient to advocate that children should be taken to the dentist every six months. This latter is obviously necessary, and will always remain a wise precaution, however much things are improved; but it should be distinctly realised that teeth do not decay except when the dietetic *régime* has brought the mouth into an unhygienic state, and it should also be recognised that this unhygienic *régime* should be rectified immediately the dental surgeon has rendered the teeth functional and the mouth potentially self-cleansing, for an unhygienic *régime* is not only a menace to the teeth, but to the child's health in general.

There has of late been an enormous amount of investigation on the subject of the nutritive value of foods. This is, of course, an important subject, at least to those who are on the verge of starvation; but to those who have enough to eat the more important question is: is the food hygienic? is it such as is conducive to health? The nutritive value of a pound of putrid meat may be about as much as the nutritive value of a pound of fresh meat, from a chemical point of view; but from the hygienic point of view it may have a totally different value. So, too, the value of food which lodges and ferments in the mouth is quite different from food which is digested in the stomach. It is with regard to the hygienic value of certain articles of diet that I intend to speak, because the nutritive value of the food has practically nothing to do with caries of the teeth.

Now it is obvious that the hygienic state of the mouth, in so far as it depends upon foods, depends more especially on what is taken towards the end of the meal, for it is the food that remains or lodges in the mouth after the meal is over which ferments and causes the disastrous results to the teeth. It is not a matter of indifference, therefore, whether a meal be finished with food which leaves the mouth clean or leaves it dirty. And, overlooked though it may have been, some foods do leave the mouth clean and some leave the mouth dirty, or, rather, do not leave it at all until they have undergone fermentation or putrefaction in the mouth. This is a simple, obvious, and important point, and has helped to give rise to a characteristically civilised custom, the custom of having arrangement in the meal. Recent investigations in the physiology of digestion have shown the wisdom of arrangement of the meal as far as digestion is concerned, and it is my intention to show how the further arrangement of the meal which custom prescribes, but which is not yet countenanced by physiologists, is eminently the result of the hygienic requirements of the mouth. We may here refer to the present state of knowledge in the medical profession. In an article on "Post-Prandial Habits" in the *Lancet* (a) last year, the following observations were made:—"As a rule, post-prandial habits do not receive the approval of physiological teaching. Theoretically they are calculated to interfere, and often in practice their indulgence does interfere, with the healthy disposal of the meal. From a purely physiological point of view, at all events, the post-prandial habits are superfluous. . . . Post-prandial habits, in short, have their origin in the fact that they are a source of enjoyment, and enjoyment is the chief excuse for their indulgence. . . . To the man who thus, as it is said, 'does himself well,' these things are regarded as the crowning attraction of a good dinner. They are, of course, nothing

more than easily acquired habits which, though associated with the meal, have really nothing to do with it regarded as a nutritious mass."

Professor Pawlow, after showing how the ordinary arrangement of the meal is justified physiologically, says:—"The usual termination of the repast is also from a physiological standpoint easy to understand. The chief meal is generally ended with something sweet, and everybody knows that sweets are pleasant." (a)

These extracts indicate the views of medical men and physiologists at the present day; and it will be observed the hygiene of the mouth is completely overlooked. It is quite true that sweets are pleasant, but it is not true that in a well-regulated repast the chief meal ends with sweets. Dessert or fresh fruit always does or should follow sweets, because sweets leave the mouth sticking with fermentable carbohydrates, and, moreover, give the mouth a clammy feeling which anyone who is accustomed to having the mouth physiologically clean has a difficulty in tolerating. There are two customs which have arisen, no doubt on account of the dirty feeling which results from refined, civilised, and more especially sweet foods. They have both originated independent of scientific teaching. One is the brushing of the teeth after meals. This is frequently done by some savage tribes, and sometimes done by the civilised. The other custom which has arisen among the more highly civilised is what we may call the *addendum prandii*, or the eating and drinking of foods which clean the mouth at the end of the meal.

The question naturally arises how far this latter custom, which has arisen more or less instinctively, is in accord with the hygienic requirements of the mouth. We know that there are three important processes which in a natural way keep the mouth in a hygienic state. These may be referred to as—(1) the mechanical, (2) the chemico-physiological, and (3) the parasitic or saprophytic processes. We know that the mouth is left in an exceedingly unhygienic state after a meal, or rather after a "nutritious mass" ending with sweets has been consumed. We must now ask if the usual additions to the nutritious mass are useful in washing away such carbohydrates or sweets as are left in the crevices and inaccessible interspaces of the teeth, which even a toothbrush cannot be made to clean out properly. I have already said that a well-regulated or hygienic repast does not end with sweets, but that the sweets are properly followed by something of a detergent nature. Firstly, let us direct attention to fresh fruit, which customarily follows sweets. We need not refer to any nutrition which may be found in fruit. This is little in amount, and unimportant from the point of view of cleanliness. Fruits, however, invariably contain cellulose in its natural state—that is to say, it is of a somewhat fibrous consistency, which, when taken into the mouth, stimulates a pleasurable amount of mastication. This is, of course, an important stimulus to the mechanical self-cleansing of the mouth. Then the fibrillar meshwork of the fruit contains the vegetable acids, the sweet juices, and the aromatic essences which render the fruits so palatable. Now when by the act of mastication these various delectable liquids are expressed from the fibrillar mass, the gustatory nerves are stimulated, the mouth is flushed with saliva; in other words, the chemico-physiological self-cleansing processes are stimulated. This, coming at the end of the meal, when the appetite has ceased to be keen and the relish for a nutritious mass is at an end, is highly important. But this is not all. The sweet and aromatic flavours remain in the mouth even after the diluted sugars have been expressed and swallowed, and thus prolong the chemico-physiological self-cleansing processes. The fibrillar part of the fruit which is swallowed last is meanwhile mopping up the particles which have been left about the crevices of the teeth, to be expressed and swallowed after further mastication. Fortunately, too, the aromatic flavours, the vegetable acids and essential oils in the fruits, leave a taste in the mouth, giving it a clean and fresh feeling which is but moderately imitated by some of our best mouth

(a) *Lancet*, Nov. 7th, 1908.

(a) Pawlow. "The Work of the Digestive Glands," p. 140.

washes, so that after the mastication of fibrous foods which so dexterously clean the crevices of the teeth there is a flow of saliva which as a further precaution seems to perform the finishing touches of the dental toilet. So much for the mechanical and physiological processes. We must just note again quite briefly the effect of fruit on the bacterial or saprophytic process. All fruits are acid, and, as Dr. Miller has shown, "Acids and alkalies, especially the former, even in very dilute solution, retard the development of bacteria." (a) Furthermore, "the growth and ferment activity of bacteria are always more or less influenced by their own waste products." (b) "The bacteria themselves are often destroyed by the action of the acid which they have produced," it therefore follows that the acid forming bacteria more especially are retarded in their growth or destroyed by the acids in fruits, while the alkali-forming bacteria are not correspondingly affected. (c)

Now let us briefly refer to the liquids which sometimes form the whole or more generally part of the *addendum prandii*. The liquid most generally consumed after a meal is coffee. This is generally recognised as a pleasant way of terminating the meal. A cup of coffee after a meal is generally slowly consumed, each mouthful washes away some of the food particles which may be lodging about the teeth, and the aromatic flavour stimulates the salivary secretions, which help to clean the mouth. If the meal has not been of a particularly sticky character, and if the teeth are normally arranged a cup of coffee may be sufficient to make the mouth physiologically clean.

It may be said that post-prandial liquids such as I have referred to have certain disadvantages. We may be told that a cup of coffee impedes digestion. Perhaps it may. But what of that? Does it necessarily follow that those who swallow their food quickest digest it best? Does it necessarily follow that within limits there is any advantage in rapid digestion in the stomach? Should we always eschew roast beef and potatoes because they take longer to digest than boiled mutton and boiled rice? I scarcely think we should, and, like other men, we will have our cup of coffee after dinner, or after any other meal at which we fancy it. Perhaps we shall have more, we may also have a fairly good hygienic reason for having it. We may take up another line of argument and claim that though coffee does retard the digestion of proteids in the stomach, it promotes the digestion of the carbohydrates by allowing alkaline digestion of the carbohydrates to be prolonged, for inasmuch as coffee is taken last and stimulates the secretion of saliva, and in so far as it mixes with the carbohydrates taken at the end of the meal, it rather aids their digestion; while the proteid digestion at the pyloric end of the stomach is unimpeded. I presume you are all aware that the supposed churning motions of the stomach are now regarded as somewhat mythical, and that for an hour or two after a meal the stomach tends to keep the food in the position in which it was introduced, although it has the power of expelling water.

We do not need to pursue this subject further at present. Enough has been said to indicate either that we know nothing about the hygiene of the mouth, or that the medical profession knows nothing or cares nothing about it. Simple methods of dental hygiene, such as the toothbrush and mouth washes, seem now to be quite inadequate to prevent the ruinous results of a dietetic system such as is being forced upon the children of the present generation with the most dogmatic assurance. Hardly has a child cut its temporary teeth before it is *restricted* to soft, fermentable foods, which stultify the natural self-cleansing processes of the mouth. Young children are almost entirely limited to milk, bread soaked in milk, milk puddings and porridge, all fermentable

foods which are non-detergent in their effects, and by the time these children have their temporary dentition complete the teeth are so tender from lack of use they naturally refuse to nibble even a crust. What can we do? We are dentists, and as it is supposed that the dietetic *régime* should be left to the medical profession it does not seem likely that we shall be able to do much without the co-operation of medical men. And when we have the great authorities paying all their attention to the nutritive value of the food it is difficult to persuade anyone that lack of oral hygiene accounts for far more trouble among children than lack of nourishment. Children are supplied with ample nourishment, except when depravity has destroyed all parental instincts. The difficulty which parents sometimes find in getting their children to take enough food results, in most cases, from the insanitary state of the mouth and alimentary canal, and it cannot astonish us that children refuse the nourishment which has brought about this insanitary state. Unfortunately the medical student is generally devoid of elementary knowledge with regard to the teeth, oral hygiene or preventive dentistry. A medical student never learns anything about the diseases of the teeth, because he knows that medical students are never examined in these subjects at their examinations. Why should this be? A man should not be a general practitioner if he is grossly ignorant of any important part of the body, much less should he be regarded as duly qualified if he knows nothing about the hygiene of the entrance portal of disease. A State which recognises any such man as qualified to practise medicine does not recognise the value of preventive medicine much less of preventive dentistry. Universities which turn out such men are doing a serious injury to themselves and to the public.

## THE TREATMENT OF RHEUMATOID ARTHRITIS.

By ALBERT ROBIN, M.D.,

Professor of Clinical Therapeutics, Physician to the Beaujon Hospital, Paris.

[SPECIALLY REPORTED FOR THIS JOURNAL.]

POLYARTHRITIS DEFORMANS, or rheumatoid arthritis, is a disease of nutrition which comprises several pathological factors. In the majority of such patients there is a history of some previous infection and gastric fermentation with retention of toxins.

Of seven patients suffering from this disease in my wards all suffered from gastro-intestinal fermentation with a diminution of nitrogenous metabolism and an increase in the coefficient of urinary toxicity. The coefficient of urinary toxicity is based on the relationship between the incompletely oxidised nitrogen (toxic) to the total nitrogen. Normally the relationship is from 13 to 15, but in these patients it reached 17.

The phenomena of rheumatoid arthritis comprise a process of osteoporosis which culminates in rarefaction and ultimate decalcification of the bones. The urine contains an abnormal proportion of earthy phosphates, lime and magnesia. The urinary chlorine is in excess, and the indican and ethereal sulphates are increased, testifying to the existence of putrefactive fermentations in the intestine. Examination of the blood reveals a slight diminution in the proportion of hæmoglobin, in fact there is a state of toxin-æmia.

These data indicate the treatment. Hitherto this has been purely empirical, and therefore uncertain, in its results. Innumerable treatments have been tried, most of them without any measure of success.

An exception must be made in favour of tincture of iodine. Recommended by Lasègue and Trouseau, it affords marked relief of the pain, provided it be given in sufficiently large doses (m. x to xx.

(a) "Micro-organisms of the Human Mouth," p. 12.

(b) *Ibid.*, p. 14.

(c) When we recognise the nature of the self-cleansing processes of the mouth it is obvious that some fruits may not stimulate these processes so well as others. It is possible too, that there may be an exception or exceptions to the rule. Grapes, for example, contain a large amount of fermentable sugar—and presuming, of course, that the skin is not eaten—very little cellulose such as would stimulate mastication.

of the Codex tincture daily). Unfortunately, this treatment often gives rise to gastric disturbances which render its continuance impossible.

Arsenate of soda is sometimes given, and Guéneau de Mussy used to prescribe arsenical baths containing two drachms of arseniate of soda and five ounces of bicarbonate of soda, the latter being omitted in cases of rheumatism associated with much pain or accompanied by a rise of temperature. The bath is taken at a temperature of 95° F., and the patient remains therein three-quarters of an hour. When the patient complained of pain on leaving the bath he prescribed eight grains of Dover's powder.

Few drugs are of much benefit—salicylate of soda, aspirine, carbonate of guaiacol, iodide of potassium, trinitrine, etc. Iron, cod-liver oil and arsenic improve the general health, but do not influence the local lesions.

Local treatment is more efficacious. Hot baths, mud baths or hot sand baths assuage the pain far better than Bier's method, the effects of which have been much overrated.

We need only mention Shuller's treatment, which consists of injecting a mixture of iodoform, glycerine and guaiacol into the damaged joints. It is very painful, and yields very uncertain results.

The practitioner will be better advised in having recourse to various methods of treatment which fulfil the therapeutical indications when associated with a suitable regimen.

I have already called attention to the constant presence of gastro-intestinal fermentation in these cases. This may be checked by a rigid dietary and the administration of antiseptics which, while arresting the proliferation of the figured elements, do not interfere with the action of the soluble ferments. In presence of lactic fermentation we may order:—

Ammonii fluoridi, 3 gr.  
Aquæ dest., 10 fl. oz.

A tablespoonful to be taken during lunch and dinner.

For butyric fermentation:—

Bismuth et cinchonidin iodid (erythrol),  $\frac{1}{2}$  gr.

Calcii carbonatis, 4 gr.

For one cachet. One to be taken with meals.

Should there be hyperchlorhydria, the patient must be allowed no meat, and if farinaceous articles are ill-digested we may give maltine, with keratinised pancreatin pills. We may also reduce the secretion of hydrochloric acid by means of the phosphates:—

Sodii bicarb., 2 dr.  
Sodii phosph., 1 dr.  
Sodii sulph.,  $\frac{1}{2}$  dr.

For one powder. One to be dissolved in a quart of boiled water and a wineglassful taken on rising, at 11 a.m., 4.30 p.m. and 9.30 p.m.

The phosphate of soda contained in this preparation facilitates the assimilation of fats, and is a general stimulant of nutrition, in fact a nerve tonic.

The patient should take a neutralising powder (prepared chalk, hydrated magnesia and bicarbonate of soda) after the meals, at the same time reducing the proportion of salt taken with food. It is well to take a cupful of some hot vegetable infusion after each meal—weak tea, camomile, etc.

This regimen, which has for object to restore the digestive functions, should be persevered with for about three weeks, after which we may have recourse to stimulating medication.

Twice a week the flying cautery should be

applied down the vertebral column. The drugs most likely to prove beneficial are strychnine, the hypophosphites, phosphide of zinc, and the glycerophosphates. These may be combined or given alternately every week or two.

1. *Strychnine*.—From six to eight drops of the tincture of nux vomica in a little water, or a tablespoonful of the following mixture, ten minutes before meals:—

Strychninæ sulphatis,  $\frac{1}{2}$  gr.  
Aquæ, 10 fl. oz.

2. *Hypophosphites*.—These products exert a selective action on the nutrition of the bones:—

Calcii hypophosph.	} aa 1 gr.
Sodii hypophosph.	
Potassii hypophosph.	
Magnesii hypophosph.	
Quininæ ferri hypophosph., $\frac{1}{2}$ gr.	
Strychninæ hypophosph., 1-25 gr.	
Sodii arseniat., 1-50 gr.	
Tinct. rhei. co., 10 m.	
Aquæ dest., 4 dr.	

The draught to be taken with each meal. Multiply the doses by 12 for a six-ounce mixture.

3. *Phosphides*.—Phosphide of zinc is given in pill form, in sixth-of-a-grain doses.

4. *Glycerophosphates*.—These may be given hypodermically (4 gr. of the soda salt) or as a mixture:—

Calcii glycerophosphatis, 14 gr.	} aa 45 gr.
Sodii glycerophosphatis	
Magnesii glycerophosphatis	
Potassii glycerophosphatis	
Tinct. nucis. vom., 8 m.	
Pepsin porci, $\frac{1}{2}$ dr.	
Maltine, 15 gr.	
Extract kolæ, 55-85 gr.	
Syr. prun. virg., 3 dr.	
Aquæ dest., ad 8 oz.	

A tablespoonful three times a day, in the middle of lunch and dinner.

This may be taken for a month, when we may proceed to order iodide of potassium, with or without arsenic, in lieu of tincture of iodine, though without reckoning too much on its efficacy.

Potassii iodid, 75 gr.  
Sodii arseniat., 1 gr.  
Aquæ dest., ad 10 oz.

A tablespoonful twice a day.

*Local treatment*.—In order to stimulate the nutrition of the bones and combat the atrophy of the muscles, the patient should be massaged daily, light "effleurage," after a bath of sulphur water lasting half-an-hour. This bath may be prepared as follows:—

Sodii monosulph., 10 dr.  
Sodii chlorid., 4 oz.  
Sodii subcarb., 4 oz.  
Gelatini, 2 oz.

Or a bag of bran.

Mild, active and passive movements should be practised morning and evening. We may inject metallic ferments in the neighbourhood of the damaged joints in order to stimulate their nutrition.

Electricity is employed in various ways. The Faradic current to prevent muscular atrophy, the Galvanic current for the pain. The positive pole is applied over the diseased joint and the negative pole over the gluteal region. Each sitting should last from a quarter to half-an-hour.

Electro-ionisation has a future before it in this connection, and has already given very encouraging results. Local and general hot air baths afford great relief.

## ABSTRACTS OF PAPERS READ AT THE BUDAPEST INTERNATIONAL MEDICAL CONGRESS.

### A CONTRIBUTION TOWARDS THE DIAGNOSIS OF LARYNCEAL CANCER.

By SIR FELIX SEMON, K.C.V.O., M.D.,  
F.R.C.P. LOND.,

Physician Extraordinary to H.M. the King.

THE author related, and graphically illustrated, those cases of malignant disease from his own practice, in which exceptional diagnostic difficulties were encountered, and in a number of which diagnostic mistakes were made. They amount to 13 in a total number of 246 cases of malignant disease seen in 33 years' practice, and the author, after faithfully recording the salient features of each of them exhorted, in conclusion his younger *confères* not to consider the early diagnosis of malignant disease of the larynx as exceedingly difficult, but to keep in mind such unusual features as are present in the following series of cases now brought forward:—

1. Malignant disease of the larynx, appearing first in the form of a curious tumefaction of the left vocal cord, which remained stationary for nearly two years before showing its true nature.
2. Chronic infective inflammation, simulating malignant disease of the larynx.
3. Extravasation of blood into the right vocal cord and below it, simulating malignant disease of the larynx.
4. Laryngeal tuberculosis in which the laryngoscopic appearances left the diagnosis between malignant disease and tuberculosis quite undecided.
5. Laryngeal tuberculosis simulating malignant disease in an old gentleman, æt. 70.
6. Tuberculous tumour, simulating malignant disease, in the anterior commissure of the vocal cords.
7. Leucoma of a vocal cord, simulating malignant disease of the larynx.
8. Epithelioma of the left ventricle of Morgagni, at first mistaken for papilloma.
9. Epithelioma originating in the form of an angioma.
10. Papilloma, occupying the whole posterior part of the right vocal cord and the inner aspect of the right arytaenoid cartilage in a gentleman, æt. 60, mistaken for malignant disease of the larynx.
11. Epithelioma of the larynx appearing in the form of snow-white, sharply pointed meadow.
12. Granuloma originating in the scar due to removal of an epitheliomatous tumour of the right vocal cord.
13. Inflamed papilloma in a gentleman, æt. 60, closely simulating the appearance of an epithelioma of the larynx.

### CHRONIC FORMS OF PANCREATITIS.

By A. W. MAYO ROBSON, F.R.C.S.,

Emeritus Professor of Surgery, University of Leeds.

MR. MAYO ROBSON drew attention to chronic pancreatitis as a clinical entity apart from gall-stone trouble, and he also described how frequently inflammatory enlargement of the pancreas accompanies cholelithiasis, especially if the concretions are in the common duct. He pointed out that chronic pancreatitis may persist long after the original cause has disappeared, and may simulate cancer of the head of the pancreas, and so terminate fatally under the impression that it is incurable, when, as a matter of fact, suitable surgical treatment is capable of curing the condition. His observations were based on a large series of cases on which he had operated, the first operation having been performed by him in June, 1890 (this patient being in good health 14 years later); a second in 1891 and a third in 1892. In the latter case death occurred two days after operation, and

a microscopic examination of the pancreas showed it to be interstitial pancreatitis. In 1895 he operated on two cases which were in good health several years later, and in 1896 on another case which was well some time subsequently. In this year (1896) Professor Riedel published a paper on inflammatory enlargement of the head of the pancreas in which he described two cases of pancreatitis (the first of which was operated on in 1893) associated with malignant disease, and another paper on cases caused by gall-stones. Mr. Mayo Robson described the symptoms, the pathological condition, the causes and the treatment of chronic pancreatitis, and showed that the anatomical variations in the relations of the common bile duct to the pancreas and in the termination of the ducts had an important bearing on the ætiology of the condition. He urged the importance of preventive treatment, such as the removal of gall-stones before they had produced complications, and the treatment of duodenal ulceration by gastro-enterostomy. If after a fair trial of general treatment, not too long continued, the symptoms persist, and the signs of failure in pancreatic digestion and metabolism were manifesting themselves, the question of surgical treatment, he said, ought to be seriously considered, especially when the disease is associated with jaundice. He said that rational treatment should aim at the cause, whether that was gall-stones, pancreatic calculi, duodenal catarrh, duodenal ulcer, alcoholism or syphilis. Even in the absence of obvious removable causes he advocated efficient drainage of the infected bile and pancreatic ducts, either by cholecystotomy or choledochostenterostomy, preferably the latter. His experience had taught him that if the cause can be removed at an early stage an absolute cure is possible; and though complete restoration of the damaged gland, in more advanced cases, cannot always be promised, yet an arrest of the morbid process may be looked for and the remaining portion of the pancreas will be able to carry on the metabolic, even if incompletely, the digestive functions of the gland.

### THE TREATMENT OF PARALYTIC DEFORMITIES IN CHILDREN.

By ROBERT W. LOVETT, M.D.,

Surgeon to the Children's Hospital, Boston.

THE author remarked in opening his address, that the subject of tendon transference in paralytic deformity has been thoroughly discussed and that no routine discussion of the matter was needed. The varieties of paralytic deformity were first discussed. These are seven. 1. Deformity due to simple gravity distortion. 2. Deformity due to adaptive shortening and lengthening of soft parts. 3. Deformity due to the contraction of non-paralysed limbs. 4. Distortion from weight bearing on partly paralysed limbs. 5. Deformity of the trunk due to effort to secure equilibrium. 6. Bony deformity following persistent malposition. 7. Dislocation. The importance of preventing paralytic deformity was next discussed, recognising the fact that deformity is in nearly all cases preventable. The use of supporting apparatus was advocated from an early period for the purpose of preventing malpositions of the paralysed limb. The treatment of paralytic deformity was discussed first, under the head of mechanical treatment, and, secondly, the operative, both supplemented by a third therapeutic measure, the development of the muscles by muscle training, massage, and electricity. The possibilities of mechanical stretching are: (1) The stretching of contracted tissues; (2) the shortening



of lengthened tissues; (3) the influence of growth toward normal by properly-fitting apparatus. In discussing operative treatment, tendon transference was first discussed. The *technique* of the operation was not dwelt on, but conclusions were presented from the operative results at the Children's Hospital, Boston. Causes of operative failure were discussed with the measures by which the results have been improved. Conclusions favourable to the performance of the operation in suitably selected cases were presented. The results of a circular of inquiry sent out to the members of the American Orthopædic Association were then given, the conclusions from this being that the operation is, on the whole, useful, and that periosteal insertion is preferable to insertion of tendon into tendon. The causes of failure were also discussed from this point of view. The developmental treatment was next discussed, and the conclusions presented that the after-treatment is fully as important as the operative. The summary of the paper calls attention to the fact that the treatment of paralytic deformity should consist of a combination of the three methods, and that the operative should not overshadow the others, and that the operation of tendon transplantation in properly-selected cases is to be regarded as a useful and satisfactory one.

## OPERATING THEATRES.

### ST. THOMAS'S HOSPITAL.

**OPERATION FOR VARICOCELE.**—MR. EDRED CORNER operated on a man, æt. 20, who was suffering from a left-sided varicocele. Mr. Corner said that the result of the operation for varicocele, which most commonly leads to disappointment and disability on the part of the patient, was a hydrocele. He then referred to the statistics given on page 208 of his book, "The Diseases of the Male Generative Organs." This distressing complication, he said, occurred in no less than 23 per cent. of the cases examined, causing the patient, if a candidate for any of the Services, to be rejected, he having thus undergone an operation which left him with as great a disability as that for which surgical measures had been resorted to. In order to meet this difficulty, Mr. Corner suggested, and was going to show how to perform, a simple modification of the operation for varicocele, by which the complication he had mentioned could be avoided. The modification, he remarked, consists in the eversion of the tunica vaginalis. This, as he has pointed out in his book, "Operations of General Practice," is the so-called Indian method, first advocated by Lt.-Col. Pratt, I.M.S., and has much to recommend it, particularly for its simplicity and excellent results. Mr. Corner made an incision, one inch and a half long, on the lower part of the abdomen over the left external abdominal ring. The skin and fat were divided, the external pudic vessels ligatured and cut through. The spermatic cord was then drawn up into the wound; the dilated varicose veins of the pampiniform plexus were separated from the vas deferens and from the deferential vessels for a distance of two or three inches. The ends were then clamped and the varicocele excised. By traction on the lower end of the spermatic cord, the testicle was next drawn from the scrotum into the wound. An incision was made into the upper part of the tunica vaginalis just large enough for the testicle to be delivered and the tunica vaginalis everted. The incision was then held open with retractors, and the testicle replaced in the scrotum. The wound was finally closed and dressed with gauze and collodion. Mr. Corner pointed out that formerly it was thought necessary to use a stitch to retain the tunica vaginalis in its everted position; but if care is taken that the hydrocele (if it exists) when dislocated is freed com-

pletely, and that the incision in the upper part of the tunica vaginalis is a little larger than the horizontal diameter of the testicle, the stitch is not necessary. He thought the gauze and collodion dressing had many advantages: the collodion dries and fastens the gauze firmly to the skin; it prevents the patient fouling the wound or exploring it with his fingers; it allows the surgeon to examine the patient freely without fear of infecting the wound; it cannot shift, and it was a very economical dressing.

## CORRESPONDENCE.

### FROM OUR SPECIAL CORRESPONDENTS ABROAD.

#### FRANCE.

Paris, Oct. 3rd, 1909.

#### INFANTILE PARALYSIS.

INFANTILE paralysis, as is well known, if abandoned to itself, terminates in complete atrophy of the affected limb, and deformities such as club-foot, genu valgum, scoliosis, etc., are frequently the result. On the contrary, when treated, although the atrophy may more or less persist, functional troubles are at least reduced to a minimum; the healthy fibres develop and restore to the muscle some of its primary vigour.

This result is particularly well marked where the treatment has been applied at an early date; but even at a later period considerable improvement may be obtained.

Three periods, says Dr. Weil, mark the development of infantile paralysis: acute, stationary, and the period of irreducible deformities.

The treatment of the acute period consists in warm baths to calm the agitation and lower the temperature, and revulsion over the spinal column.

As soon as the acute stage is over, energetic treatment having in view, on the one hand, to raise the tone of the general condition, and on the other to cure the local lesions, should be instituted. This treatment should combine several therapeutic methods, but a large place should be reserved to one or other forms of electricity (galvanic or faradic).

The general treatment comprises tonics (iron, phosphates), salt water baths, stimulating frictions, sea or mountain air. The local treatment consists in an association of electro-therapy, massage, passive movements, and re-education of the limb.

Each *stance* of electricity, which may be renewed daily, should be followed by a general massage of the whole limb, while passive movements of the articulations should be ordered as soon as they are possible.

During the day-time, the child should be encouraged to use its paralysed limbs, to walk, if its lower limbs are affected, to move his shoulders or his arms, in the case of the upper extremities.

The electric treatment should be continued for months and years, with intervals of rest.

A year or a year-and-a-half after the *début* of the paralysis, especially in the case of the lower extremities, an attempt should be made to correct the vicious attitudes by orthopædic appliances.

At the end of two or three years, if irreducible deformities exist, surgical treatment should be applied (section or suture of tendons, arthrotomy, etc.), and followed for some months by massage and electricity.

#### TREATMENT OF TUBERCULOUS ADENTITIS.

General treatment, including sea air, hygiene, appropriate nourishment, is of primary importance, but medical treatment should not be neglected. Cod-liver oil in winter, if tolerated by the patient, otherwise, it may be replaced by phosphated iodotannic syrup:—

Phosphate of soda,  $\frac{1}{2}$  dr.

Tannin, 30 gr.

Iodine, 12 gr.

Syrup, 10 oz.

Two table-spoonsful a day.

At the same time arsenical preparations should be prescribed, either by the mouth (Fowler's solution) or

by hypodermic injections (cacodylate of soda, 1 gr.). An injection daily for eight days, with suspension eight days, and so on until twenty-four injections are given, after which a rest of two months before recommencing the series.

Where the patient supports the administration of arsenic by the mouth, the following pills may be ordered:—

Arsenious acid, 1/64 gr.  
Hydrochl. of quinine, 1 gr.  
Powder of nux vomica, 1/5 gr.  
Ext. of cinchona, 2 gr.

For one pill; from 2 to 4 daily at meal time during 15 days per month.

To replace the loss of minerals in the organism, one of the following wafers should be taken after each meal:—

Carbonate of magnesia, 2 gr.  
Carbonate of lime, 5 gr.  
Phosphate of lime, 5 gr.  
Fluoride of calcium, 1/5 gr.  
Sugar, 15 gr.

### GERMANY.

Berlin, Oct. 3rd, 1909.

#### THE RELATION BETWEEN DISEASE OF THE STOMACH AND DISEASES OF WOMEN.

A PAPER on this subject appears in the *Ber. Klin. Wochensh.*, 24/09, by Dr. L. Lewisohn, of the Universitätspoliklinik, f. innere Krankheiten, Berlin. The writer thoroughly examined the gastric function, both as regards secretion and motility in a number of women suffering from diseases peculiar to females. His observations extended over 100 cases. 66 cases had to be excluded, as their gastric disturbances were quite independent of the affection of the genital organs from which they were suffering. It was only in a comparatively small proportion of the cases that in patients who were suffering simultaneously from both classes of disease, the one form of disease stood in a causal relationship to the other. The writer makes observations on 36 such cases. Some of his conclusions were:—

1. That examination of the contents of the stomach during the menstrual period, gravidity, and the puerperium did not give any clear conclusion as to the secretory function.

2. It was only in a comparatively small number of women who were suffering simultaneously from both gastric disorder and affections of the genital organs that the pathological process in the latter had any relation as to cause with the former.

3. Examinations of the contents of the stomach of women living in various districts, who were suffering at the same time from genital disorders, did not give a uniform result. Sommer, of Gratz, found hyperacidity, Kehrer, of Heidelberg, found a normal secretion, Winkle, of Berlin, and the writer found sub-acidity.

4. Affections of the stomach might be associated with the most varied disorders of the genital system.

5. When there was a causal relationship between the two any special nervous disorder was preceded by an alteration of the general nervous system. Disorders of the genital system might be looked upon as the starters of or deciding cause of the general nerve disease.

6. Before anything else general treatment must be taken up, if called for after careful examination of the secretory condition of the stomach. Finally, he gives a note of warning against a gynaecological polypragmasia.

#### NUCLEIN IN PROGRESSIVE PARALYSIS.

The action of this highly praised substance in progressive paralysis is discussed in a recent number of the *Prager Med. Wochensh.*, by Dr. Oskar Fischer. He first of all alludes to the fact that cases that had been diagnosed as progressive paralysis repeatedly ended in recovery. Even if the diagnosis was not quite free from objection in some of the cases, similar ones were recorded in recent literature (reckoning from about 1870), in which complete recovery took place.

In all these cases that recovered the fortunate result always followed some febrile affection, and especially long-continued fever after grave suppurations. In arriving at a determination as to the way in which the febrile affection acted, two factors especially came into consideration. First, the toxins circulating in the blood or the heightened temperature as such, might act on the body, and especially on the brain, in such a way as to assist the organism to a successful struggle against an otherwise incurable disease. One might well imagine, however, that the long-continued hyperleucocytosis of the blood was a powerful curative factor in chronic disease of the brain.

In the year 1907 the writer made repeated injections of nuclein in some cases of progressive paralysis, with a view of setting up a leucocytosis, and the course of the disease in these cases was so interesting that the investigations were continued in 1908. Hyperleucocytosis was set up by regular injections of sodium nucleinate (Böhringer), at first in large doses, later in doses of 1/2 gm. in a 10 per cent. solution 3 to 5 times a day. The injections were given subcutaneously. Soon after the injection a heightened leucocytosis set in of 16 to 25,000, and lasted three days. The first injections generally caused considerable swelling of the limb into which the injection was made, but this did not appear after the later injections. As many as 32 injections were made in one case, without any appearance of mischief.

The treatment was tried in 22 cases in which there could not be any doubt in regard to diagnosis. The cases were selected in such a way that the injections were made in every other case whilst the intervening cases were observed as controls.

Of the 22 cases treated general remissions took place in four, two of them—they were of the expansive form of the disease—became perfectly quiet, and went home sound in mind; the one two years at home is in a mildly maniacal condition, the other has been at home nine months, and has been able to resume his business, only—as his wife reports—he cannot reckon as well as he used to do. The other two cases from the first progressed as cases of simple dementia; the first came under observation in an advanced state of imbecility, and changed so far in the course of three months that he was sent home well; he returned, however, in four months bad again; the fourth improved in the clinic, both mentally and bodily, but still remains in the institution in a condition of simple paralytic dementia. Of the cases treated four are already dead, the remainder continuing without any essential change in their condition.

In the 22 control cases, on the other hand, there were no remissions whatever, and four were already dead.

The number of cases treated is too small for definite conclusions to be drawn from them, but, as the writer says, the results obtained could scarcely be accidental, and they were so interesting that they were an invitation to a trial on a larger scale, and especially so as the treatment was so simple and perfectly free from any objectionable features.

### AUSTRIA.

Vienna, Oct. 3rd, 1909.

#### DISEASE OF THE ALIMENTARY CANAL.

KIENBÖCK, in his clinical lecture at the Poliklinik, gave a long history of the various methods of diagnosis and treatment of the oesophagus and stomach. The oesophagus was peculiarly afflicted with stenosis and dilations running on to diverticular sacs, which were often difficult to diagnose without the assistance of radiography. Kienböck divides these lesions into "high pulsion diverticals," "low pulsion diverticals," and "idiopathic dilatation." Stenosis and dilatation are frequently associated, the one often depending on the other. There may be difficulty in swallowing food, but deglutition, sounding, emesis, or the oesophagoscope will not confirm the nature of the lesion. Percussion and auscultation of the thorax should never be overlooked, as this will give the location of a divertical

or dilatation from its spindle shape or irregular position. Some clinicians advocate filling the spaces or diverticula with a coloured fluid, but this is never satisfactory. The most reliable diagnosis is the radiograph, which can be clearly defined with a solution of bismuth, or it may be done with a bolus and its movement observed till it reaches the stomach, while peristaltic action, movement of heart and lungs can be noted. The radioscope may and has been of advantage in some cases, but the radiograph gives the most general satisfaction.

The high-seated pulsion divertical is sometimes called Zenker's sac, from the author, who first described the lesion in 1877 by recording 34 cases, while Starck, in 1900, published 93 of the same class. Many more have been added to our literature since that time, yet the affection is not a common one, and rarely to be met with in common practice.

Zenker believed in a congenital weakness of the pharynx as the proximate cause, and therefore a congenital condition easily accomplished by slight pressure outwards by the food, hence the origin of pulsion. Paltauf since that time records a high divertical due to poliomyelitis that would favour the origin being a spinal cause. According to Zenker's observation, the divertical commenced immediately below the pharynx, either in the median line laterally or posteriorly, but in his own cases more commonly on the left side of the œsophagus, where it followed the sheath of a muscle commencing in a space the size of a pea till it reached a size as large as a child's head, bifurcating sometimes, and holding a litre of water.

The symptoms are usually those of stenosis, irritation, pain, retching or vomiting during or after food, if pressure be applied later to the divertical vomiting or regurgitation with great quantities of mucus, but no free hydrochloric acid. There is, not infrequently, difficulty in breathing, hoarseness and laryngitis, with recurrent paralysis from pressure on the trachea, etc. The lesion is more common in advanced years, and the incidence is greater in the male than the female, and may be borne from ten to forty years till perforation, ulceration, or mediastinitis closes the scene in pneumonia or pulmonary gangrene.

Here he gave an example:—A merchant, æt. 45, had suffered for five years with difficulty in swallowing and regurgitation. The sound sometimes passed into the stomach, sometimes not. By pressing on the left side of the neck food could be brought back. With the radiograph the shadow of the heart and vessels was normal, the lungs clear, except a small margin in the left resembling a gland; diaphragm normal, but the medium shadows wider in the upper part about the second rib uniting the sternum. The patient was then given a solution of sodium carbonate and tartaric acid to drink, which greatly expanded the shadows laterally. Bismuth powder was next given, which passed to the bottom of the sac. An angular radiogram gave a recess, with the bismuth lying in front of the spine, which rose and fell with every effort at deglutition. A tube was then directed from the mouth backwards into the sac, which was found to be of a considerable size lying between the spine and mediastinum, causing a good deal of bulging of the trachea.

Eiselberg operated and removed the sac, carefully closing the œsophagus, and now the patient is perfectly healthy and strong.

The pathogenesis of this lesion is not very clear. Vetter and Rosenheim think it is due to an atony of the œsophagus in the first place, and probably induced by catarrh or other anatomical changes of the mucous membrane that may finally produce cramp and destruction. Mikulicz was a firm believer in a cardio spasm of the œsophagus as the principal cause of the lesion. Meltzer attempted to prove this by physiological experiments by irritating the cardia which acted on the terminal of the vagus and produced the morbid conditions usually present. Paltauf, on the other hand, supports a theory that the disease is an idiopathic dilatation, and that atrophy takes place in a circular band of the œsophagus, as he had found this in some of his own cases, where the vagus nerve was found embedded in a band of atrophic tissue.

THE INTERNATIONAL MEDICAL CONGRESS, BUDAPEST.—In another part of our present issue will be found abstracts of some of the important papers read at the Congress. Among the excursions, a popular one was that of a visit to the "Apenta" springs, where the process of raising the bitter waters was shown, together with the ingenious machinery employed. Everything, in fact, connected with the raising, bottling, and dispatching of this popular aperient water is done severally by English, American, or German machines, and the scrupulous cleanliness that prevails throughout, so that the water does not come into contact with the hands of the workers, was fully explained and exemplified to the visitors. Nevertheless, medical surveillance is exercised over the employees, so that there shall be only healthy persons on the premises. During three or four days parties consisting of several hundred members of the Congress went to see these wells.

## FROM OUR SPECIAL CORRESPONDENTS AT HOME.

### EDINBURGH.

INTRODUCTION OF PROFESSOR ARTHUR ROBINSON.—Professor Robinson, who has succeeded the late Professor Cunningham in the Chair of Anatomy at Edinburgh, delivered his opening lecture in the Mac-ewan Hall, on October 1st. Principal Sir William Turner, in introducing the new Professor, said that it was not an easy thing to follow a man like Cunningham, and cordially welcomed Professor Robinson to his new chair. Professor Robinson's subject was "A Glance at Anatomy from 1705 to 1909," and in his lecture he drew the attention of his hearers to some of the broader features of the history of anatomy and the history of the chair of anatomy in Edinburgh. Having sketched the history of the chair down to the occupancy of Sir William Turner, Professor Robinson said that the influence of that gentleman as a teacher of anatomy might be gauged to some extent by the fact that his pupils held, or had held, the chairs of anatomy in Edinburgh, Glasgow, St. Andrews, Newcastle, Manchester, Liverpool, Cardiff, Oxford, King's College (London), Dublin, Belfast, Melbourne, Sydney, Montreal and Toronto. He knew of no other such record. In the past hundred years the science of anatomy had made more progress than in any previous time. The results got from improved methods and improved instruments, in the hands of an army of investigators, would amaze the anatomists of the latter part of the eighteenth century could they return among us. A knowledge of the true form of the heart had only been gained comparatively recently, and a proper conception of the shape and size of the stomach was a still more recent acquisition which had been provided by the observations of Cunningham and Waterston. Our knowledge of the anatomy of the nervous system had been revolutionised during late years by skilful experiments and observations. Nature, as revealed by anatomy, showed plainly that she had no beliefs in any general equality. She produced her children in myriads, cast them into the sea of circumstance, approved and helped only those who could swim, and rewarded them according to their performances. The riddle of life was not yet solved, but numbers had sought and would seek, and in the search some would find, in the future as in the past, knowledge useful to mankind.

MEDICAL INSPECTION OF SCHOOL CHILDREN.—The Aberdeen County Committee on Secondary Education laid before a representative meeting of the School Boards interested a proposal that for the purposes of medical examination the whole county, including burghs, should be treated as one area. It is proposed to appoint a principal Medical Officer at £300 per annum, and an assistant at £200, with increment and travelling expenses, and to utilise the services of the district nurses in the work. The estimated cost during the first year, including salaries, administration, and apparatus, is £2,050, which will be divided among the various boards in the event of the scheme being adopted. In Dumbarton the first report on the medical

examination of children is now published. It deals with 634 scholars, and one of the salient features is that the children are considerably under the average weight, though equal in height to the figures of the Anthropometric Commission of the British Association. Dr. Little suggests that an experiment should be made in the way of feeding a selected group of children.

### GLASGOW.

THE procedure in the appointment of a CHIEF MEDICAL OFFICER FOR THE INSPECTION OF SCHOOL CHILDREN,

under the care of the School Board, of the very important parish of Govan, gave rise to protests on the part of several members of the Board. As mentioned last week, a Glasgow man was appointed, who was, in fact, the assistant to the occupant of the chair of Forensic Medicine in the University. It appears that his appointment was carried only by the casting vote of the chairman. Now the appointment was made by the Board sitting as such, and is quite legal. But, further, the procedure followed was reasonable and not "absolutely dishonourable and contemptible," as has been stated. What happened was this: Out of 74 applicants for the post, the Board in committee of the whole Board made a short list of nine. Subsequently the committee reduced the list to five, whom we will call Drs. A., B., C., D., and E., and, by subsequent voting, Dr. E. (Dr. Brown) was dropped from the list, and by a final vote Dr. D. The committee agreed to recommend that the appointment should be made from among Drs. A., B., and C. When the Board met to receive the recommendation and make the appointment, Dr. C. had been appointed for Glasgow, and was therefore no longer a candidate. A motion was made to reinstate Dr. E.'s name among those to be voted on. This was done, and he was appointed. The complaint is that Dr. D. had a preferable right to have his name voted on, Dr. E. having been dropped before him. But for the reason already stated he obviously had no such right.

### THE MEDICAL PRELIMINARY EXAMINATION.

The pass lists of the Medical Preliminary Examination at Glasgow University show that while 25 passed in Latin, only 1 passed in Greek. This is scarcely fair to Greek, to which medical nomenclature owes so much. Greek is optional in the examination, and French or German can be taken instead. A considerable number passed in French, but none in German.

GLASGOW MEDICO-CHIRURGICAL SOCIETY.—The opening meeting of the session took place on Friday last, October 1st, when the President, Robert Muir, M.A., M.D., Professor of Pathology in Glasgow University, delivered his Presidential Address on "The Doctrine of Inflammation," in which he remarked that the want of a generally accepted definition of inflammation led to confusion and needless discussion in the consideration of clinical phenomena. After a brief historical survey of the nature of pathological processes and the compound character of inflammation, he arrived at the general conclusion that it is impossible to define inflammation as a pathological process and at the same time to maintain its relation to the recognised cardinal signs. It should only be used as a convenient, though somewhat indefinite, clinical term.

### BELFAST.

THE QUEEN'S UNIVERSITY OF BELFAST.—The Senate of the new University met at the College on the 28th ult. and proceeded to nominate a secretary. Mr. J. M. Finnegan, B.Sc., B.A., was nominated, and subsequently appointed by the Commission. Mr. Finnegan has had many years experience in teaching work, preparing students for examinations with great success, and his popularity with the students will no doubt smooth his way in the performance of his new duties.

A GOLD MACE FOR BELFAST UNIVERSITY.—The Vice-Chancellor submitted a letter from Mr. William Gibson, of Donegall Place, Belfast and Regent Street, London, offering to present to the University a gold mace of the finest quality of gold, and of the same

size as the Royal sceptre. Needless to say, the offer was accepted with much gratitude.

THE POLLUTION OF BELFAST LOUGH.—The question of the pollution of the shores of the Lough by the city sewage always assumes a more acute form at this time of year, when the smell from the decaying matter becomes more than usually offensive. Consequently, the Belfast Foreshore Committee, a body composed of residents in the districts specially affected by the nuisance, has hit on an appropriate time for the publication of a special report, giving the history of the Corporation's dealings with the problem, and their proposals for future schemes. It is impossible even to summarise the matter here, the question is so complicated; but it may be said that while the Corporation has been most dilatory in fulfilling the duties imposed upon it by Act of Parliament, it can shelter itself to some extent behind the various experts who have examined and reported, their reports and recommendations being mutually destructive. In Belfast Lough we have to deal with a large area of slob land exposed at low water, on to which the sewage from some 380,000 inhabitants is discharged. On this the soft green seaweed known as *ulva latissima* flourishes in enormous quantities, and as it withers and decays it fills the air with sulphuretted hydrogen derived from the sulphur in its composition. The latest proposal of the Corporation is one for the sedimentation treatment of the sewage, but the Local Government Board do not consider this efficient, and even if it be accepted as a preliminary treatment to some more thorough method, the tanks will have to be larger than those proposed by the Corporation. The latter were designed to store the sewage for 8½ hours, but the Board say that 12 to 14 hours will be necessary. It is now proposed to ask the Royal Commission on Sewage Purification to nominate six persons competent to determine what further purification, if any, is necessary to comply with the Act of 1899.

## LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

### BONE-SETTERS AND INFANTILE PARALYSIS.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—As your journal is at the present moment engaged in a campaign against quacks and quackery, I venture to bring before your readers some of my personal experiences of the ways of the bone-setter. During the current year I have had under my care seven cases of chronic infantile palsy: of these no less than five had previously consulted one of the above-mentioned class of impostors. In every instance a diagnosis was vouchsafed of "joints out" or "leaders off," and a cure promised in a few weeks. I will quote briefly two examples:—

(1) Girl (14), paralysis of left lower limb, together with weakness of back muscles at same side, causing some degree of scoliosis. The lesion had occurred at the age of four. The parents—well-to-do people—had consulted the family physician, and the child was subsequently taken to a specialist. After about a year's treatment by massage—without, however, any attempt having been made at electrical stimulation—her parents were informed that nothing more could be done. Not satisfied with this verdict, they presently took the patient to a bone-setter. This gentleman announced that "the leaders of the spine were off," and that he would soon make everything right. He proceeded to carry out daily manipulation for a period of six weeks, charging a fee of five shillings per sitting. The net result of these proceedings was to throw the child into general ill-health, and the "leaders" remained "off," as before.

(2) Girl (4½), suffered from weakness of right leg from age of six months: attributed by parents to a fall. The medical attendant diagnosed infantile paralysis, and after six months' treatment (here, again, without electricity) gave an unfavourable prognosis. As the child grew, walking became possible to some

extent, but the knee-joint on the affected side was seen to stick out backwards to an abnormal extent. The parents—people, it may be noted, in fairly good circumstances—now consulted a bone-setter, who stated that the child was suffering from a dislocated knee, the result of an injury. Then followed a period of two months' distress for parents and child, at the end of which time they lost faith in the man's promises of cure, and abandoned his so-called treatment. This was a year ago. At the present date, although the hip and thigh muscles are but slightly paralysed, the knee-joint is "wobbly" to a degree, and there is complete paralysis of the calf-muscles and peronei. Possibly this may all be due to the original attack; but it is at least reasonable to assume that brutal handling for a period of eight or nine weeks did something to increase the existing lesion.

For an ignorant man to pose as a setter of fractures and reducer of dislocations is bad enough in all conscience; but that such a person should be allowed to torture helpless children, and delude parents into anticipating a speedy cure of what is, after all, to a greater or less extent, an incurable disease, is purely a monstrous state of affairs. Such an expression of opinion in a medical paper is, however, a mere preaching to the converted. It is more to the point to ask can we, as individual members of the medical profession, do anything to lessen this evil? In both the above cases the orthodox practitioner had had, so to speak, first innings. I am convinced that it is a great mistake ever to tell the parents of such children that nothing more can be done. If it were even approximately true, it would be injudicious—for treatment of some sort they will have. But it is never true until the patient has reached full growth, and often not then. No case should be pronounced incapable of further improvement until a course of Faradism has been tried, and all muscles not hopelessly paralytic should be stimulated from time to time until the period of development is over. The effect of interrupted currents on the trophic function of the spinal cells should never be forgotten, for, apart from their effect on individual muscles, their frequent application will, to a great extent, obviate the increase of "relative shortening" so common in this disease. Such treatment, together with the prevention of deformities, the provision, and supervision if need be, of suitable apparatus, will furnish ample justification for keeping in touch with these cases; and, incidentally, by showing the parents that the doctor is not merely folding his hands and muttering *Kismet*, render it unlikely that they will wander from the true fold to seek the aid of rogues and charlatans.

I am, Sir, yours truly,

FRANCIS HERNAMAN-JOHNSON,  
M.B., Ch.B., R.N. (Ret.)

Bishop Auckland,  
September 30th, 1909.

#### SOLDIERS' TEETH.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—With reference to your editorial on the dismissal from the Service of a batch of trained soldiers otherwise physically fit, merely because of defective teeth, one would like to know whether the cases were seen and reported on by a dental surgeon besides the medical officers. In the days of the "Brown Bess" musket it was necessary that the men should have sound front teeth to enable them to bite the cartridges, but nowadays, a soldier's teeth are required for no other purpose than mastication. Nature provides sixteen teeth in each jaw; but, if sound, half of this number are quite enough for chewing purposes. It is absurd to attempt to provide soldiers with artificial teeth; they are mostly of very little use in mastication, and in the majority of cases need frequent repairs and attention. It is probable that the teeth of the men dismissed could have been made efficient by filling or capping—covering in decayed crowns with complete metal caps. Caps can be made of gold of a low standard; that of 9 carat, silver being mainly used as the alloy, is comparatively inexpensive, and

very hard and durable. Teeth of which the nerve has not been exposed treated in this way will last a lifetime; and a few molars so strengthened would suffice to do the chewing work of the soldier for much longer than the usual term of service.

I am, Sir, yours truly,

HOSPITAL DENTIST.

London, W., October 4th.

#### THE DECLINING BIRTH-RATE.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—If your readers wish to study a most able statement of the case against reckless use of artificial checks on the number of children as a remedy for social evils, I would refer them to the classical work of Arnold Toynbee, "The Industrial Revolution," 7th ed., 1906, p. 112, *et seq.* If you will allow me I will briefly summarise the statement. The problem is a vital one, and must be faced in spite of the suggestion that it should only be discussed "under the decent veil of a dead language." He examines the question in the light of French social history. He shows that in Departments of France where the population is on the decline owing to the widespread adoption of artificial checks, although the districts are the best cultivated in France, and enjoy great material prosperity, the general happiness promised is not found. These Departments show most crime, one-third being indecent outrages; and infanticide is rife. There is the evidence of experience against the idea that a stationary and materially prosperous population will be necessarily free from vice. A stationary population is not a healthy condition of things in regard to national life; it means the removal of a great stimulus to progress. The incentive to invention and enterprise is removed; it is certainly true that the struggle for existence is essential to progress. Such practices, moreover, prove injurious to the children themselves. French parents strive to leave to each child a comfortable maintenance; it would be better for them to be brought up decently, and then left to the battle of life. Much genius and inventive power has come from men belonging to large families, obliged to win their own way. The question cannot properly be considered from the point of view of wealth alone; the family life is the source of all that is best in national life. The necessity of supporting and educating a large family is a training and refining influence in the lives of the parents—the one thing that can turn them into good citizens. French practices are unnecessary in England. Prudence in marriage in every class is alone called for. The willing emigration (there is limitless space and scope in our vast colonies) of some of the children meets all difficulty. The question whether there is room in the world for more need not be considered, for there is room, and in the interests of civilisation it is desirable that a nation with a great history and great qualities should advance in numbers. The improvement of the quality of the lower strata of the people can be brought about by social reforms, improvement of their dwellings, better education, better amusements. The true solution is to be found in a high ideal of spiritual life, a growth towards a purer and higher condition of society.

I am, Sir, yours truly,

ANOTHER STUDENT OF SOCIOLOGY.

October 2nd, 1909.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—For the life of me I fail to see how the national wealth of any country touches the question of a declining birth-rate, seeing that such a small minority participate in the wealth. No civilised community has ever yet existed, neither ever will (nature not permitting) that can supply a sufficient number of wealthy and luxurious persons who deliberately suppress their families for social enjoyments, and upon whom the stigma of a declining birth-rate can be brought home. Socialists, with whom I have no sympathy, tell us that "every year about 700,000 people die in the United Kingdom, 600,000 of these

do not leave any property worth mentioning," and I have no doubt these figures would apply approximately to other countries. It seems clear, therefore, we must look to the vast majority to account for the decline. Here ease and luxury are out of the question. What evidence have your correspondents in support of their extraordinary ideas?

I take it as one of the defects of civilisation that there has existed from time immemorial the outgrowth of town at the expense and diminution of agricultural populations. This readily explains unemployment and the increased tensivity of competition, hence the declining birth-rate. Without this explanation it would be impossible to account for excessive competition in countries like Australia, Canada and New Zealand, which at present are neither cultivated nor populated.

I am, Sir, yours truly,

CLEMENT H. SERS, M.R.C.S.

Brighton, September 30th, 1909.

## OBITUARY.

SIR THOMAS SMITH, Bt., K.C.V.O., F.R.C.S.

WITH much regret we announce the death of Sir Thomas Smith, Bt., K.C.V.O., at the age of 76 years. Sir Thomas was educated at Tonbridge School and at St. Bartholomew's Hospital. He was closely connected with the hospital during the whole of his professional life, and was a Consulting Surgeon and Lecturer at the institution, whilst his capabilities as a teacher and adviser to the students were such as to make him revered and admired by the whole of the medical staff. Besides his appointment as Honorary Serjeant Surgeon to the King, Sir Thomas was also a Consulting Surgeon to the King Edward VII. Hospital. Formerly he had been a member of the Council and a Vice-President of the Royal College of Surgeons. Many members of the Royal Family were numbered among his patients, and he also attended the late Mr. Gladstone. He was of a most genial and kindly disposition, and his loss will be lamented by many friends and former pupils. His death has removed a well-known and distinguished personality from the professional world.

## SPECIAL REPORTS.

### THE OPENING OF THE MEDICAL SCHOOLS.

#### MIDDLESEX HOSPITAL.

THE London Medical Schools commenced their new year on Friday last, and in some of them the opening took the shape of a formal address.

At Middlesex Hospital Mr. Shackleton, who was accompanied by Mrs. Shackleton, spoke on medical work within the Antarctic circle. He said explorers did not go in much for theory. They found things had happened, and they left people whose job it was to find out what these things meant. In medical science there had been some very interesting things in the Antarctic regions. On his expedition they had three doctors and surgeons. The expedition came through without any deaths, due to the fact that they had these men with them. One man lost an eye down there, and one of the principal London doctors who looked after that sort of thing saw the place where the eye had been, and said that the operation was done as well as it could have been done in a London hospital. That was very satisfactory, considering that the operation was performed when the man was lying on a board in a very low temperature. The only other serious operation was due to frost-bite. One man lost his big toe. He still carried his toe about with him in a bottle as a trophy.

There was some very strange things in the Antarctic. For instance, it had been discovered that the rotifers brought back on the *Nimrod* which could live in a temperature 50 to 60 degrees below zero, could be heated

up to 230 degrees Fahrenheit, and then frozen again and come out smiling. He believed that was all the more strange because these little animals had to take the actual temperature of the surrounding atmosphere. That was not the case with human beings, but their temperature in the Antarctic suffered some great reverses, if he could put it that way. On the plateau the temperature went down many degrees below zero, and he believed that usually a white sheet was put on a man when he got down to that. But after meal times their temperature went up to normal. People often said that it was remarkable that they never caught colds in the Antarctic or Polar regions. The members of his expedition never caught a cold until they opened a bale of clothing that had been bottled up in England. Then they all caught colds. Those who went out directly into the cold winter's night lost their cold at once, but those who remained in the hut kept theirs for two or three days. Those were small points, but they were of interest as practically touching things which perhaps could not always be discovered in the laboratory.

Mr. Shackleton distributed the prizes to the students, and Mrs. Shackleton presented gold, silver, and bronze medals to the most distinguished nurses of the year. Prince Francis of Teck, Lord Cheylesmore, the members of the board of governors, and the honorary staff of the hospital, received the visitors, and the famous explorer and Mrs. Shackleton inspected the hospital's cadet company of the University of London Officers' Training Corps.

In a marquee erected in the grounds there was a large assembly of the friends of the students, and here Dr. J. Strickland Goodall delivered an Introductory Address on "Walking the Hospital."

#### ST. MARY'S HOSPITAL.

At St. Mary's, the Principal of London University, Dr. Miers, delivered an Inaugural Address.

"It has been," he said, "too much the fashion to decry youthful efforts, and to endeavour to persuade ourselves that knowledge and experience are required before anything good comes out of a man unless he be a Heaven-born genius.

"For my part, I believe this to be really the productive period of an ordinary man's life, and that he who takes the trouble to search the history of his own mental development will find that anything which is the unaided product of his own intellect dates from this period; that the germ of any original thought which finds its expression in his more mature life is to be traced to late boyhood or early manhood."

Dr. Miers continued by entering a protest against the present tendency to insist more and more upon the necessity of preparation. "Before you can begin one subject you are told that you must master another, and a great part of our life is occupied in preparation for something else; indeed, there are people who, not only in their student days, but through their whole life, are so much overwhelmed by the necessity of preparation that they spend it in preparing for things that are never done, endeavouring to master the ideas of others before daring to have ideas of their own, and pass an existence of promise without ever attaining to performance. It is quite clear that if you never undertake anything until you are fully and completely prepared, you will not get very far."

He paid a tribute to enthusiasm, and welcomed the more liberal view of education. He went on to emphasise the value of enthusiasm and to protest against the view of the old school that it is sound policy to teach the distasteful because of the greater effort needed for the assimilation of such matter. He welcomed the more liberal, saner view that has come into modern education, as shown by the contrast between the time-honoured "crib" and such translations as those of Gilbert Murray.

"I would assert," he continued, "that we, in our active life, need the inspiration of a theory, the illumination of an idea, which can glorify the drudgery of preliminary studies and the details of ordinary practice.

"That is the spirit of modern scientific work; the



restless desire to prove or to demolish the theory on which we are working for the moment, and to discover the principles which underlie all that we can observe or do. It is this faith in a principle, this hope that we shall discover it, this certainty that our theory is leading us on the way to its discovery, that gives to even the drudgery of scientific routine work such a fascination for those who have once tasted the delight of scientific research.

"Work illuminated by a theory, or carried on with a general principle in view, cannot fail to be interesting, even though it be only work required for preliminary examinations.

"The moral that I wish to draw for my present purpose is this: In all your work have a theory and believe in it, let it be your own, if possible, now in the creative and inventive period of your life; test it, not by the opinions of others or by their knowledge, but by your own observation and your own experience. No matter if you have later to reject it. Work uninspired by an idea is as aimless as a life uninspired by principles. The idea, especially if it is one's own idea, lends an interest and an excitement to scientific work, and, indeed, to all work, and, like the wishing cap of Fortunatus, transports its owner to a new world."

Dr. Miers illustrated his contentions by reference to the work of Pasteur and Darwin, and continued:—

"I wish that teachers would remember that to the medical student subjects should be taught as the physics, chemistry, etc., of medicine, illustrated by examples drawn from the art of medicine, illustrating the general principles and current theories of the science of medicine. It would, no doubt, be very satisfactory if every medical man would have been first a mathematician, then a physicist, then a chemist, and so on through the different stages until he finally became a doctor. But life is not long enough for this process, and the minds of ordinary men are not able to contain so much knowledge.

"As regards the learning of these subjects, if the medical student will regard them with the eye of a doctor, and never lose sight of their medical significance, they can, I think, never fail to have an interest for him. And if he wishes to do this he must keep a firm hold upon the general principles and the wide theories of his own science which embrace those of all other sciences, because they are, in fact, all manifestations of the same general principles.

"If you read the history of the great discoverers, or of those who have made any successful advance in science, you will find that this is the spirit by which they were animated in their student days; the determination to understand what they learned by getting a grasp of general principles, to put an idea of their own into it, and so to get something new out of it."

He concluded:—

"Herein is the great charm of scientific work; in every observation or experiment, time-worn exercise though it may be, there is something new to be seen, some discovery to be made by those who have eyes to see it and an idea to guide them. To such a person they can never be mere exercises, they are a field of unknown possibilities. I suppose there is no science in which these possibilities are more rife than in yours; so, in spite of my ignorance of the principles of medicine, I have no hesitation in asserting again that the student who can work, however humbly, in the spirit which animated Darwin in his young days, is certain to find an intellectual interest that cannot otherwise be acquired, and is certain to be rewarded by some advance or discovery, some new fact, or some new thought, that will be a full compensation for any labour that he may have incurred in the process."

#### UNIVERSITY COLLEGE HOSPITAL.

University College Hospital has been for some time under its own management. Sir John Tweedy delivered the Opening Address there, at 3 p.m., in the library of the school. Contending that character, with all that the term connoted—thoughtfulness, sympathy, courtesy, and culture—was essential to ensure success in practical affairs, he said that knowledge was one of the elements and conditions of power, but to be

effective it had to be protected by wisdom. Conspicuous inaptitude for practical art was nowadays scarcely possible owing to the present examination system. But this, as he showed, had not always been so, for Arnold of Villanova had recorded in the thirteenth century that he knew an excellent professor of natural science, learned in medical theory, who could not treat the simplest ailment.

Sir John estimated the quack as a man who was able to appreciate arguments and similarities, but who failed to appreciate differences. He proceeded to show how a change had come over medical education. "Heretofore the education of the student has been chiefly literary, based upon pedagogic authority and the dictatorship of books. Henceforth both the character and method of study will be altered. The knowledge taught must be knowledge capable of verification."

Discussing the difference between observation and experiment on the lines laid down by Mill, Sir John Tweedy illustrated his remarks by references to medical discovery. "The science of medicine," he said, "has been advanced mainly by the researches of those who have not been directly engaged in the treatment of disease. When new knowledge has been discovered by these means, it has been received by competent judges, and, by the influence of their authority, it has been accredited and diffused.

"Failure to appreciate the difference between the dissemination of knowledge and the advance of knowledge has given rise to much confusion of thought and not a little waste of endeavour. Perhaps the crudest manifestation of this confusion is the belief, real or feigned, by some persons, that inquisitorial experiments are performed in hospitals on men or on animals, or both. Less crude—nay, even creditable in a sense—is the notion that, by establishing sanatoria or endowing special hospitals for the treatment of particular classes of general diseases, it is possible to solve the problem of the nature and origin of these diseases and to hasten the discovery of the means of prevention and cure. Logically, this assumption is false; economically, it is wasteful. It is based on a misapprehension of the function of hospitals and of the methods by which scientific discoveries are made. Far be it from me to discourage the most generous pecuniary support of hospitals. Money is greatly needed for their maintenance, and will be needed in increasing proportions if hospitals are to avail themselves of the resources which scientific research is continually placing at their disposal. The great desideratum of our day is adequate endowment of biological and pathological research as the surest and most humane way of discovering the nature and cause of disease and the means of its prevention. Clinical observation only deals with disease when and as it manifests itself in man and animals; it throws but little light upon the causes of disease or upon the intimate processes which constitute the pathological state.

"Supremely useful as hospitals are for the purpose of treating the sick by the help of the best skill and knowledge of the time, and as schools for the training of successive generations of medical practitioners for the service of the community, it is nevertheless true that most of the capital discoveries of scientific medicine have been made outside hospitals and very often apart from clinical observation altogether. Among the most remarkable of these discoveries I may mention those relating to malaria, Malta fever, yellow fever, and, I might add, other diseases, which have baffled the best clinicians for centuries. In surgery, too, it may be said that the scientific basis of the modern aseptic method has been established not by clinical observation, but by experimental research. Another simple but striking instance supporting my thesis is afforded by the history of the use of the ligature for the arrest of hæmorrhage from wounded arteries. Nothing, it might seem, can be more obvious than to tie a bleeding artery. The records of surgery inform us that the ligature has been so employed, more or less systematically, by surgeons for over 2,000 years; but, simple as the procedure may seem, the true method of tying an artery was not established until the beginning of the last century."

Sir John went on to say:—

"Dr. J. F. D. Jones, at the beginning of last century, by a series of ingenious experiments, mostly on horses, proved that the endeavour of surgeons to apply the ligature without injuring the arterial tunics was precisely the cause of the failure of the ligature permanently to arrest bleeding. Jones demonstrated that the true method was to employ a small, firm ligature drawn sufficiently tight to cut through the inner and middle coats without rupturing the tougher and external coat. Every practical surgeon will bear testimony that, as the result of Jones's experiments, tens of thousands of lives have been saved.

"I have lingered about this question because you, as future practitioners of medicine, will have to form an opinion on the justifiability of experiments upon living animals for the purposes of scientific research, and if you are satisfied that these experiments are justifiable, with proper safeguards, you will be called upon to defend the practice and to justify your opinion. To do this intelligently it is necessary not only that you should be acquainted with the arguments for the defence, but that you should also make yourself master of the arguments on the other side. It is not enough to ascribe the opposition of the public to ignorance or fanaticism. There may be either or both, but objection can only be overcome and acquiescence gained by enlightening and educating the public mind. It should be remembered that the mass of a nation must be convinced of the value of a general principle which is being carried out, else what we might judge the most salutary change will be ineffectual. Ritchie, in discussing the Rights of Minorities, has remarked that on matters of public health only the scientific expert can, in the first instance, form a sound judgment. In democratic societies there is often a distrust of scientific opinion. The remedy is not despotism, but public enlightenment, and the scientific specialist is bound, therefore, by patriotism, as well as in the interests of his own science, to lend what aid he can to the popularisation of science, from which he is too apt to recoil. It is the sole antidote to ignorance or pseudo-science. Those whom science neglects, fanaticism and quackery will claim for their own."

At King's the Act for incorporation with the University received the Royal Assent in August of last year, but, unfortunately, for formal reasons, the Act is not to take effect until next January.

At St. George's, Dr. H. D. Rolleston, Senior Physician to St. George's Hospital, in his Introductory Address at the opening of the session of the Medical School attached to the hospital, reviewed the influence of St. George's men on the advance of medical knowledge.

Other hospitals have prepared for the winter. St. Thomas's has now plenty of accommodation since the building additions have been completed, including arrangements for a maternity ward. The Old Students' Dinner took place on the evening of the 1st inst. at the Hotel Cecil, Mr. Lawford in the chair.

Guy's has also completed building arrangements.

Charing Cross and Westminster are proceeding "as before."

The London School of Tropical Medicine is continuing its prosperous career. The school oration will be delivered on the 26th inst. by Professor Osler.

#### HEALTH RESORTS—VERNET LES BAINS.

VERNET LES BAINS is situated in the Eastern Pyrenees (Pyrenées Orientales), and undoubtedly deserves the name of "Paradise of the Pyrenees." Independently of the value of its mineral waters, one can hardly imagine a spot with more peaceful surroundings, more perfect atmospheric conditions, and more admirable hotel accommodation.

Vernet is reached from Paris by the Orleans Railway to Toulouse, then by the Midi line to Villefranche.

The journey from Paris to Toulouse takes about 11½ hours, and from Toulouse to Villefranche more than 5 hours, on account of the horseshoe curve running through Carcassonne, Narbonne and Perpignan. Two delightful breaks can be made, one at Toulouse—a very interesting town on the Garonne, with a superb museum—another at Carcassonne, the "Cité" of which to the south-west of the town is an ancient fortress of the 11th and 13th centuries, containing a town of 1,200 inhabitants and a magnificent cathedral church, part of which is 11th century and part 13th century, with a tomb of Simon de Montfort. After Perpignan the line, now single, passes very close to the Mediterranean, winding amongst lagoons, called here "étangs"; here, too, it has an upward incline for 52 kilometres to Villefranche. From various points the traveller can observe not only many frontier chateaux in ruins, but also the majestic Canigou which so effectually shelters Vernet. With reference to this mountain, it is whispered at Vernet with bated breath that when an English patient, gazing at its summit, softly murmurs, "*Can I go*," there? his cure is nearly an accomplished fact.

From Villefranche station a drive of about two miles gradually ascends through a picturesque valley, flanked by a semi-circle of frowning, cloud-tipped mountains. Here the pure air, scented by the pines, revives the tired traveller, and makes him forget the fatigues incident on his railway journey. The strange assortment of vehicles is a source of wonder, very obsolete motor char-à-bancs, three-horsed (unicorn) wagonettes with the inside turned the wrong way, and with a box-seat of a coach back and front, even an ancient diligence, coupé and all—with five horses—every vehicle, however, perfectly safe and driven with skill. The old village of Vernet, with chalets peeping out here and there is passed, a fleeting glimpse being caught of the distant mountain of St. Martin du Canigou, where the delicious Liqueur du Canigou is made; the robust visitor at once feels eager for the climb to the monastery, whilst the invalid hopes that with such atmospheric and climatic surroundings his pains and aches may disappear and he, too, may soon be in a fit condition for the ascent. At the end of the village, after passing the Hotel des Bains Mercader and crossing the Cady (called a river, but really a torrent), one is greeted with a vista of hotels, casino, villas, etc., framed in a delicious park and having for background a comparatively small mountain covered with trees, the Alsina (the property of the establishment), on which may be noticed a few paths winding amongst pine and olive trees, Japanese medlars, mimosas, etc.; all these flora, common enough round Vernet les Bains, bearing silent but indisputable witness to the temperate climate enjoyed at this station, at an altitude of 2,000 feet. The English visitor on entering his hotel is at once struck, not only with the French coquetterie in all the apartments, but also by the admirable ventilation as shown by the purity of the air in all the rooms and the complete absence of that stuffiness not altogether unknown in many caravansaries; after a few days he will realise also that the hygienic arrangements leave nothing to be desired, the drainage being perfect and the No. 100's kept as in England.

It may be noted that Vernet possesses one great advantage over the other sulphur springs of the Pyrenees, namely, that being at the eastern end of the mountain range, and therefore at the extreme south of France, it is really situated in a more southern latitude than Nice, and, indeed than the whole "Côte d'Azur"; therefore, owing to the mildness of its climate, it is available all through the year, even in the depth of winter. There is no cold, no dampness, no wind, no fog. A very picturesque, and from a hygienic point of view, a very important sight is the dairy which supplies the milk to the establishment. A stroll of about ten minutes from the hotel on the left bank of the Cady brings the explorer to a model stable, the large door of which opens on to a green pasture sloping down to the torrential stream. In this shed nine milch

cows can be seen in perfect health and condition; these are twice milked in the twenty-four hours. The cleanliness of everything, from the straw in the stalls to the dress and hands of the keeper of the animals, is irreproachable. The man is evidently proud of the cows and their surroundings.

The waters of Vernet les Bains are all of the sodium sulphate class, and the thermality of the springs ranges from 45 to 165° F. There are twelve natural springs yielding an immense quantity of water. The analysis of two of them is as follows:—

#### THE VAPORARIUM SPRING:

Temperature, 127° (53° Centigrade).

Analysis (per litre-unity):—

Alkalines ... ..	0.0726 (SO <sub>2</sub> H <sub>2</sub> )
Sulphide of sodium ... ..	0.0189
Hyposulphide of sodium ... ..	0.0032
Silicate of sodium ... ..	0.0286
Free silica ... ..	0.0422
Bicarbonate of sodium ... ..	0.0621
Bicarbonate of calcium ... ..	0.0073
Bicarbonate of iron ... ..	Traces
Sulphate of sodium ... ..	0.0327
Sulphate of potassium ... ..	0.0083
Sulphate of magnesium ... ..	Traces
Chloride of sodium ... ..	0.0151
Organic matter ... ..	0.0127
Dry sediments ... ..	0.235

#### THE URSULE SPRING.

Temperature, 108° (42° Centigrade).

Analysis (per litre-unity).

Alkalines ... ..	0.0727 (SO <sub>2</sub> H <sub>2</sub> )
Sulphide of sodium ... ..	0.0156
Hyposulphide of sodium ... ..	0.0048
Silicate of sodium ... ..	0.0280
Free silica ... ..	0.0418
Bicarbonate of sodium ... ..	0.0008
Bicarbonate of calcium ... ..	0.0076
Bicarbonate of iron ... ..	Traces
Sulphate of sodium ... ..	0.0306
Sulphate of potassium ... ..	0.0053
Sulphate of magnesium ... ..	Traces
Chloride of sodium ... ..	0.0136
Organic matter ... ..	0.0124
Dry sediments ... ..	0.229

The Mercader baths communicate directly with the hotel of the same name, and are fitted up with all modern hygienic and curative desiderata. All the most perfect types of apparatus for hydrotherapeutic medication are employed. Here we find a douche room, a douche massage room, "Aix-Douche," where the marvellous effects of under-water massage can be enjoyed; an inhalation room, a pulverisation room, a room specially devoted to vaginal and rectal douches; a douche Tivoli room (wave bathing), foot baths, etc.

The Commandants Baths contain apparatus for douches, inhalations, pulverisations, etc., of the latest kind, also vapour baths; but their great charm is undoubtedly the magnificent swimming-bath, which shows a large expanse of warm, running, sulphurous water, in which a swim can be enjoyed in the winter as well as in the summer.

The maladies successfully treated at Vernet during all seasons are rheumatism, arthritis, gout, neuralgia (sciatica), neurasthenia, chronic bronchitis, bronchial catarrh, nose, throat, and ear affections, sprains, dislocations, old fractures, dyspepsia, anæmia; but, above all, convalescents and those who desire to regain their lost strength and to repair their digestive organs are absolutely certain to derive immense benefit from a visit to Vernet. In the words of Prof. Landouzy, "Vernet may be regarded as a hydrotherapeutic station with a double aspect—sulphurous and climatic."

## LITERARY NOTES.

MESSRS. J. AND A. CHURCHILL inform us that the *Medical Directory* for 1910 will contain a descriptive list of all the most important British spas and health resorts. It has been compiled by Dr. Norman Hay Forbes, ex-Vice-President of the British Balneological

and Climatological Society. We believe it will be a great help to medical men in deciding where to send their patients for balneological and climatological treatment. We may add that the *Medical Directory* for next year is now being compiled, but the editors can still receive information.

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IN addition to the list of new editions of standard medical works referred to in our last issue, we may mention that Messrs. Churchill have just published another revised edition of Dr. Hale White's "Manual of Materia Medica." This work was first published in 1892. Its great popularity is evidenced by the fact that an eleventh edition is now called for. Messrs. Longmans have issued a new edition of "Gray's Anatomy" (the seventeenth), revised and edited by Dr. Robert Howden, Professor of Anatomy in the University of Durham. The notes on "Applied Anatomy" have been revised by Dr. A. J. Jex-Blake and Mr. W. F. Fedden, F.R.C.S. Messrs Longmans also announce for publication in a few days a new work on "The Relation of Medicine to Philosophy," by Dr. R. D. Moon.

## LABORATORY NOTES.

### "P.G.B." LIQUEUR BRANDY.

WE have examined a sample of this brandy, and we find it to contain 46.96 per cent. of alcohol by volume (equal to 82.30 per cent. of proof spirit) and 1.02 per cent. of extractives. The fixed acid amounts to 0.04 per cent. (calculated as tartaric acid) and the volatile acid to 0.03 per cent. (calculated as acetic acid). The volatile ethers (calculated as ethylic acetate) amount to 130.6 parts per 100,000 parts of absolute alcohol in sample. The specific gravity is 0.9416. The evidence afforded by the taste and smell of the sample examined are in accordance with the claim of this brandy to be a genuine old spirit prepared from the alcoholic fermentation of grape juice. The flavour is exceptionally agreeable, and quite free from the rough taste that characterises an unmaturing brandy. The spirit is sold with a guarantee of its origin and of its being fourteen years old. We consider that it is eminently suitable for medicinal purposes and as a beverage. The brandy is introduced into Great Britain by Messrs. Wilson and Valdespino, Limited, of New London Street.

## NEW PREPARATIONS.

### FERRO-GLIDINE.

MESSRS. MENLEY AND JAMES, of Farringdon Street, London, have sent us samples of some new products. The first one, "ferro-glidine," is a preparation of iron in organic combination with pure vegetable protein. The recognition of the superior therapeutic value of iron in this kind of combination marks a distinct onward step in the pharmacology of that indispensable drug. The remedy is put up in the form of a large tablet packed in tubes of 20 and sold in boxes containing three tubes. Arsan is a further organic combination which presents arsenic with glidine, a non-irritant vegetable albumen obtained wholly from wheat and free from extractives. It has been found of value in syphilis and sleeping sickness. Lusan presents mercury in pure organic combination with pure wheat albumen. It is sold in tubes containing 25 tablets, and offers an excellent method of administering that drug to private patients. Bromoglidine is a similar preparation with bromine, and put up in the same form; its administration has been found most useful in epilepsy, especially in incipient cases of the malady, reducing the frequency of attacks, and in certain cases subduing them entirely.

## MEDICAL NEWS IN BRIEF.

### King's College Hospital Medical School Dinner.

THE annual dinner of the past and present students of King's College Hospital Medical School was held at the Waldorf Hotel on Friday, October 1st, 1909,

T. Hugh Smith, Esq., F.R.C.S., of Farningham, being in the chair. Of the hospital consulting and active staff, the following were present:—Dr. Burney Yeo, Dr. Ferrier, Prof. W. Rose, Sir W. Cheyne, Mr. Barrow, Dr. Dalton, Mr. Carless, Dr. Pritchard, Drs. Silk, Phillips, Whitfield, Playfair, Flux, Steen and Briscoe, Mr. Burghard and Mr. Cargill. Amongst the others present were Drs. Walters, Allfrey, Short, Lewis, Shuttleworth, Child, Essery, E. Wood, Val. Matthews, Davidson, E. Thurston, C.I.E., and the Secretaries, Dr. St. Clair Thomson, Mr. Peyton Beale, Dean of the School, and Dr. Wiltshire. There were 106 present. Mr. Hugh Smith proposed the toast of the evening, and in his remarks pointed out the immense amount of work which the student of the present day had to carry out in comparison with the student of past times, and also how much more strenuous his career had become. He also alluded to the fact that this was the first year of the school's existence as the Medical School of King's College Hospital. Previously it had been part of the Medical Faculty of King's College, London, but owing to the incorporation of that body with the University of London, the Medical School of the hospital, though still a school of the University, became independent. This was also necessary in view of the impending removal of the hospital to South London. He also alluded to the excellent examination results of the last few years. Dr. Walters, in replying, said that he was student in the year 1853, and he gave some idea of the work of the hospital and its staff at that time, mentioning the names of Farre, Todd and Partridge as great teachers. He said that he had no doubt whatever, when the hospital was rebuilt at Camberwell, and was able to expand its special departments, which were at present hopelessly cramped, its work would be better than it had ever been, and he felt sure that it would occupy the premier position amongst London hospitals and medical schools. Thanks were returned to the committee and secretaries of the dinner, which was pronounced to be most excellent both in kind and arrangement, and was voted a very great success by all present.

#### Royal College of Surgeons in Ireland—Students' Guide.

A GUIDE for Medical Students has just been issued by the Royal College of Surgeons in Ireland for the Session 1909-10. It gives full information for students studying for the conjoint diplomas of the Royal Colleges of Physicians and Surgeons, Dublin. The preliminary entrance examination will be held on Wednesday and Thursday, October 6th and 7th. The lectures and practical courses will commence on Friday, October 15th. The College accepts in lieu of the preliminary entrance examination the certificates of all examinations in general education recognised by the General Medical Council. During the summer recess the College of Surgeons School has been completely overhauled, and a considerable sum has been expended on improvements. The Guide, which is useful to intending students, will be sent post free on written application to the Registrar, Royal College of Surgeons, Stephen's Green, West, Dublin.

#### Death under Ether.

An inquest was held by Mr. Walter Schröder at Paddington, on September 25th, concerning the death of James Cross, aged 38, a farm labourer, of no fixed abode, who suddenly expired at St. Mary's Hospital after an administration of ether, and before a necessary surgical operation had been commenced. The jury found that the anæsthetic was duly and properly administered, and that death was due to misadventure.

#### Asiatic Cholera at West Hartlepool.

It is announced by the *Newcastle Chronicle* that, as the result of the bacteriological and post-mortem examinations, it has now been definitely ascertained that the death of the Swedish fireman removed to the Hartlepool Isolation Hospital from the Danish steamer *Sikkeborg*, was due to Asiatic cholera. The vessel having been disinfected in conformity with the Local Government Board's regulations under the supervision of the port medical officer, Dr. Biggart, and the inspector, and no further cases of

sickness having occurred on board, she has been released from quarantine.

#### The London Hospital Medical College (University of London).

THE following Entrance Scholarships have been awarded:—Price Entrance Scholarship in Science, value £120, Mr. J. Bostock. Entrance Science Scholarship, value £60, Mr. A. G. Winter. Entrance Science Scholarship, value £35, Mr. R. J. M. Love. Epsom Scholarship, value £126, Mr. H. G. Winter. Price Scholarship in Anatomy and Physiology (University Scholarship), value £60, Mr. J. R. Marrack (St. John's College, Cambridge).

#### The Royal University of Ireland.

THE following candidates have passed the First Examination in Medicine:—

Henry Alcock, Charles Bannigan, William W. Blair, Maud S. Budd, Patrick Cagney, Edward P. Carey, David M. Clements, William Deely, John J. Dowdall, Francis W. Doyle, B.A., Joseph Doyle, Sch., Owen J. R. Forde, Edward T. Freeman, Walter F. Hare, Herbert M. Jackson, Thomas Kennedy, Maurice B. King, Marie R. Lynch, William McElroy, Henry McGlaughlin, Mary C. McKenna, B.A., Edward U. MacWilliam, Edward A. M. Magennis, John Moonan, William A. Murphy, Gerald P. O'Donnell, Henry T. O'Neill, Samuel E. Picken, John E. Power, Robert L. Rea, Augustine K. Roche, John A. Sellars, Edward Tempamy, Catherine J. Timony.

The following may present themselves for the further examination for Honours in the subjects set opposite their names. Those qualified in two or more subjects may present themselves for the further examination for Honours in all:—

Patrick Cagney, Chemistry; David M. Clements, Physics; John J. Dowdall, Zoology; Joseph Doyle, Sch., Botany, Zoology, Chemistry, Physics; Thomas Kennedy, Chemistry; Maurice B. King, Physics; Edward U. MacWilliam, Botany and Physics; Edward A. M. Magennis, Zoology; John Moonan, Physics; Gerald P. O'Donnell, Zoology; Samuel E. Picken, Botany, Zoology; Robert L. Rea, Botany, Zoology, Chemistry, Physics; Augustine K. Roche, Chemistry; Catherine J. Timony, Zoology and Chemistry.

The following candidates have passed the Third Examination in Medicine. Those marked with an asterisk may present themselves for the further Examination for Honours:—

Upper Pass:—\*Crooks, Frederick, \*Hodnett, Joseph O., \*Johnson, John C., B.A., \*McConnell, Robert I., \*Mullane, Henry J. V., \*O'Hammon, Oriel J. O.

Pass:—Cogen, Maurice J., Cummins, Robert C., Davy, Thomas P., Fitzgerald, Gerald, Foley, David J., Lynch, Homer H. C., Lyons, John, Maguire, Thomas J. R., Millar, William M., Moren, Alfred J., Murphy, Mary A., O'Brien, William, O'Flynn, Joseph A., O'Keefe, Eileen M., Osburne, John C., Patrick, Joseph, Prendiville, Joseph, Rishworth, Walter N., Rothwell, Thomas G., Smyth, William J., Twigg, Francis J. D., White, Patrick W., Wilson, William.

#### Apothecaries' Hall of Ireland.

At the meeting of the Apothecaries' Hall of Ireland the following were elected Examiners for the ensuing year:—

Surgery—Professor Conway Dwyer, Sir Thomas Myles.

Medicine—J. M. Day, J. O'Donnell.

Midwifery—R. H. Fleming, R. J. White.

Ophthalmology—E. Magennis, R. J. Montgomery.

Pathology—J. L. Keegan, R. J. Rowlette.

Materia Medica—J. D. Crinion, W. Fottrell.

Hygiene—Sir Charles Cameron, H. F. Powell.

Materia Medica—J. D. Crinion, Seymour Stritch.

Pharmacy—F. G. Adye-Curran, E. F. Hanrahan.

Anatomy—Professor E. P. M'Loughlin, P. J. Fagan.

Physiology and Biology—Professor D. J. Coffey,

William O'Kelly, J. Knott.

Chemistry—Professor Hugh Ryan, J. J. O'Sullivan.

Physics—Professor Hugh Ryan, B. Burke Kennedy.

## NOTICES TO CORRESPONDENTS, &c.

Correspondents requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

### SUBSCRIPTIONS.

SUBSCRIPTIONS may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s.; post free at home or abroad. Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially-appointed agents. Indian subscriptions are Rs 15.12. Messrs. Dawson and Sons are our special agents for Canada.

### ADVERTISEMENTS.

For ONE INSERTION:—Whole Page, £5; Half Page, £3 10s.; Quarter Page, £1 5s.; One-eighth, 12s. 6d.

The following reductions are made for a series:—Whole Page, 13 insertions, at £3 10s.; 26 at £3 3s.; 52 insertions at £3, and pro rata for smaller spaces.

Small announcements of Practices, Assistancies, Vacancies, Books, &c.—Seven lines or under (70 words), 4s. 6d. per insertion; 6d. per line beyond.

**SUBURBAN PRACTITIONER.**—The publication of a change of address in a medical journal by a medical man, whatever his position, seems to us an undignified proceeding. In the case quoted the gentleman referred to is an official of the Royal College of Physicians of London, which renders the incident still more surprising. We quite agree that were an ordinary practitioner to do a corresponding thing in a lay newspaper he would in all probability be promptly "hauled over the coals."

**H. J. PARSONS.**—Your general impression is right, but we must remind you that the Medical Defence Union, at any rate, puts at the head of its description "Established to promote honourable practice." It is, of course, less easy to advance the right than to attack the wrong; but, at the same time, it is reassuring to find an association of medical men making a formal avowal of a set policy of the kind.

A CORRESPONDENT writes complaining that he is much troubled by patients who ask questions over the telephone, and that he finds many of them in that way reduce the number of consultations and visits. If a medical man gives substantial advice over the telephone, he is entitled to charge for it. It would be well to let patients know that such would be the case. Some medical men leave the answering of telephone to some responsible person in the household, with instructions as to answering special calls.

### PURE MILK.

A FARMER close to a town near Glasgow recommends his milk thus. He says: "I send a sample of my milk to be analysed every six months, and the chemist never has any fault to find with it."

**MR. SANDOW AND THE "TIMES."**—A correspondent asks whether an article which occupied half a page in the *Times* of September 29th, which it states was "prepared in the interests of readers of the *Times*," is to be taken as an editorial, or as an advertisement? We can only refer our correspondent to the manager of the *Times* and Mr. Sandow.

**HEALTH IN INDIA.**—"Civil Servant" would do well to follow the example of sensible Europeans, who may form the society of the station to which he is ordered. There can be no doubt that into an Indian dietary alcohol in any form should be very sparingly admitted, if admitted at all.

**MATER.**—The deformity is usually curable by operation. Consult your family doctor, and he will if necessary call in a specialist.

## Meetings of the Societies, Lectures, &c.

### WEDNESDAY, OCTOBER 6TH.

**MEDICAL GRADUATES' COLLEGE AND POLYCLINIC** (22 Chenies Street, W.C.)—4 p.m.: Mr. M. White: Clinique (Surgical). 5.15 p.m.: Lecture: Mr. M. Yearsley: The Nose and Ear in School Medical Inspection.

### THURSDAY, OCTOBER 7TH.

**MEDICAL GRADUATES' COLLEGE AND POLYCLINIC** (22 Chenies Street, W.C.)—4 p.m.: Sir Jonathan Hutchinson: Clinique (Surgical). 5.15 p.m.: Lecture: Mr. J. Clarke: A Series of Abdominal Cases.

**NORTH-EAST LONDON POST-GRADUATE COLLEGE**, (Prince of Wales's General Hospital, Tottenham, N.)—4 p.m.: Mr. J. Bland-Sutton: Hernia of the Uterus in Men and Women. (Opening Lecture.)

### FRIDAY, OCTOBER 8TH.

**ROYAL SOCIETY OF MEDICINE** (20 Hanover Square, W.)—Clinical Section: 8 p.m. Cases by Dr. Rolleston, Mr. Albert Carless, Mr. James Sherren, Dr. Finzi and Dr. Ernest Shaw. Demonstration: Dr. Bayley: Demonstration of the Treponema Pallidum in Syphilitic Lesions; of the Spirocheta Dentium in Carious Dentine; and of the Spirocheta Refringens in Balanitis. Papers by Sir Dyce Duckworth: (1) A Case of Gout with Tophaceous Deposits in Mahomedan, with photographs; (2) A Case of Gout with Uric Tophi in a Boy, aged 14. Dr. Herringham: Two Cases of Pneumonia with considerable Displacement of the Heart simulating Pleural Effusion.

**MEDICAL GRADUATES' COLLEGE AND POLYCLINIC** (22 Chenies Street, W.C.)—4 p.m.: Mr. S. Stephenson: Clinique (Eye).

### MONDAY, OCTOBER 11TH.

**MEDICAL GRADUATES' COLLEGE AND POLYCLINIC** (22 Chenies Street, W.C.)—4 p.m.: Dr. S. E. Dore: Clinique (Skin). 5.15 p.m.: Dr. Harry Campbell: "Treatment of Neuralgia."

**MEDICAL SOCIETY OF LONDON**—8 p.m.: General meeting. 8.30 p.m.: Incoming President's address; Paper on "Two Cases of Perforation of the Small Intestine," by Mr. Hugh Lett.

### TUESDAY, OCTOBER 12TH.

**MEDICAL GRADUATES' COLLEGE AND POLYCLINIC** (22 Chenies Street, W.C.)—4 p.m.: Dr. Essex Wynter: Clinique (Med.). 5.15 p.m.: Dr. E. C. Hort: "Rational Immunisation from a Practical Standpoint."

## Appointments.

**BRUCE, T. H., M.D., C.M.Glasg., F.F.P.S.Glasg.**, Regius Professor of Anatomy in the University of Glasgow.

**CARSON, J. T., M.B., Ch.B.Edin.**, Junior House Surgeon at the Bolton Infirmary.

**EDWARDS, A. H., M.B., F.R.C.S.**, Dispensary Surgeon, Western Infirmary, Glasgow.

**EMMERSON, HERBERT, M.R.C.S., L.R.C.P.Lond.**, Honorary Ophthalmic Surgeon to the Chesterfield and North Derbyshire Hospital.

**GORDON, A. BRUCE, M.B., Ch.B.Edin.**, Resident Medical Officer at the London Temperance Hotel.

**HOARE, E. F., M.D., Ch.B.Liverp., L.S.A.**, Deputy Medical Officer and Vaccinator to Daisybrook Schools by the West Derby Board of Guardians.

**MARNOCK, J., M.B., C.M.Aberd.**, Professor of Surgery in the University of Aberdeen.

**ROBERTS, ERNEST T., M.D., C.M. Edin.**, Principal Medical Officer for the Inspection of Children in the Glasgow School Board.

**SHEPHERD, H. F., L.R.C.P. and S.Edin., L.F.P.S.Glasg.**, Certifying Surgeon under the Factory and Workshop Act for the works of the South Shields Gas Company, at South Shields, in the county of Durham.

**THIRNE, W., M.D.Edin.**, Medical Officer for the Workhouse and the First District, and Public Vaccinator for the First District, of the Barnet Union.

**NICOL, JOHN WILLIE, M.B., C.M.**, Physician to the Wards for Skin Diseases, Western Infirmary, Glasgow.

**TOMKINSON, I. GOODWIN, M.D.**, Physician to the Skin Dispensary, Western Infirmary, Glasgow.

**YOUNG, DR. ROY F.**, Extra Dispensary Surgeon, Western Infirmary, Glasgow.

## Vacancies.

**Sussex County Hospital, Brighton.**—House Surgeon. Salary £120 per annum, with board and residence in the Hospital with washing. Applications the 5th day of October next, addressed to the Secretary. The election will take place on the 20th October, 1909.

**The Hospital for Sick Children, Great Ormond Street, London, W.C.**—A House Surgeon. Appointment for six months. Remuneration £30, with board, washing, and residence in hospital; also Anaesthetist (honorary). For further particulars see advt.

**Brighton, Hove, and Preston Dispensary (Northern Branch).**—Resident Medical Officer. Salary £160 per annum, with furnished rooms, coals, gas, and attendance. Applications to the Assistant Secretary, 113, Queen's Road, Brighton.

**Nottingham General Dispensary.**—Two Assistant Resident Surgeons. Salary £160 each per annum, with apartments, attendance, light, and fuel. Applications to C. Cheesman, Secretary, 12, Low avement, Nottingham.

**Birmingham General Dispensary.**—Resident Surgeon. Salary £200 per annum, including cab allowance. Applications to Ernest W. Forrest, Secretary, 32, Union Street, Birmingham.

## Births.

**HARMAN.**—On September 30th, at 108 Harley Street, London, W., the wife of N. Bishop Harman, F.R.C.S., of a daughter.

**MEAGHER.**—On September 25th, at Haulbowline, the wife of Fleet-Surgeon Edward Meagher, R.N., of a daughter.

**VARVILL.**—On September 29th, at 1, Sussex Place, Southsea, the wife of Bernard Varvill, B.A.M.C., of a son.

## Marriages.

**DICKSON—RHODES.**—On September 29th, at St. Leonard's, Bridgnorth, Louis Edington Dickson, M.D., B.S., son of S. J. E. Dickson, solicitor, of Chester, to Margaret Helen, only daughter of the late William Rhodes, M.R.C.S. and L.R.C.P., and Mrs. Rhodes, of Bridgnorth.

**DOUGLAS—MARTIN.**—On September 30th, at St. Peter's Church, Jersey, Archibald C. B. Douglas to Hilda, daughter of J. H. Martin, M.D., of Thornhill, Jersey.

**GIBBS—HARPER.**—On September 28th, at Heanton-Punchardon, North Devon, Stanley Rider Gibbs, M.R.C.S., L.R.C.P., younger son of the late Joseph Huoks Gibbs, to Margaret Ellen, daughter of the late Dr. Joseph Harper, of Barnstaple.

## Deaths.

**ROBINSON.**—On October 2nd, at Bellevue Cottages, Whitehead, co. Antrim, Ireland, Dr. William Robinson, late of Falcon Road, Battersea, London aged 49 years.

**SMITH.**—On October 1st, at 5 Stratford Place, London, W., Sir Thomas Smith, Bart., K.C.V.O., F.R.C.S., Honorary Surgeon to H.M. King, aged 76. No flowers, by request.

# THE MEDICAL PRESS AND CIRCULAR.

"SALUS POPULI SUPREMA LEX."

VOL. CXXXIX.

WEDNESDAY, OCTOBER 13, 1909.

No. 15

## NOTES AND COMMENTS.

### **The Passing of Honorary Staffs.**

IF we read aright the signs of the times, the day is at hand when there will be no more honorary medical attendance at the hospitals. If medical residents and nurses and secretaries and other officials and servants are to be paid for their services, why should not the medical men also be compensated for the skill, time, and labour which is required of them? In some institutions a fee of £50 or £100 is actually paid to members of the honorary staff, but the fact is usually carefully kept in the background, and the payment entered as a lecturing fee or travelling expenses. Indeed, it is not easy to imagine any logical scheme of philanthropic medical relief which does not provide adequate payment to the medical men upon whose skilled work the existence of the hospitals depends. Nowadays the stress of professional competition falls heavily on the younger men, who are more handicapped than ever in the struggle to obtain an adequate income. Before another generation is past the reaction will probably have set in, and the honorary hospital appointment will have vanished into the limbo of forgetfulness, along with other gratuitous services that have been foisted upon a humane and easy-going profession. In point of fact, the change is even now taking place.

### **Barry Pays its Hospital Staff.**

THE hospital problem has been worked out at the Welsh town of Barry in more ways than one. Some time ago the townsfolk determined that they would have their own rate-supported Accident and Surgical Hospital, a scheme that was duly carried out. The medical staff was purely honorary and selected from local medical men. Some time later the remainder of the local practitioners requested to be put on the rota, and the whole question was referred to the British Medical Association. In the upshot the hospital committee has recommended the Town Council to agree to the employment of the whole of the doctors of the town, in batches of four, each to be paid £20 per annum. This will involve an additional expenditure of about £350 from the rates for the maintenance of the hospital. It is to be hoped that the Barry Council will maintain its high standard of wisdom and independence by resolving to pay its medical men for their services. To furnish a full hospital organisation out of the rates for the benefit of its citizens and then to tax the medical profession for its maintenance would be to revert to the bad old traditions whereby the unfortunate medical man is the instrument of all kinds of vicarious charity. Of late, however, the spirit of collective defence has somewhat stimulated

the wisdom of the dove, and medical men are beginning to realise the truth of the old maxim that the labourer is worthy of his hire.

### **Death of a Medical M.P.**

THE sudden death of Dr. George J. Cooper, Member of Parliament for a London constituency, deprives the medical profession of an active representative in the Commons. His end was due to a stroke of apoplexy, and while actually in the lobby of the House the attention of Sir Walter Foster was drawn to him by the peculiar flush upon his face. There can be little doubt that the untoward result was due in great measure to the strain put upon members of Parliament by a protracted and arduous session. Dr. Cooper carried on a large private practice, but his attendance in the House was punctual and practically unflinching. He was one of the few medical men in the Commons who really represented the interests of his profession. The record of his public work includes service on the London County Council, of which body he was a member from 1899 to 1906, and retired only upon his election to the House of Commons. His death has left a gap in medical representation that we can ill afford. His work has been well done, and it may be said of him that his life was sacrificed to duty, and he died like a soldier, fighting in the forefront of the battle.

### **The Need of Medical M.P's.**

THE record of self-sacrifice and of achievement left by Dr. Cooper will not be lost if it draws general attention to the need of medical men in Parliament. Apart from purely professional interests, there are many ways in which an enlightened medical member may do yeoman service to the public weal. Think for a moment of the many social conditions and circumstances, such as housing, water-supply, drainage, emigration, education, the purity of food, air and water, and the thousand-and-one things in which modern scientific medicine is more or less directly concerned. In all these matters the advice of the medical member may be absolutely indispensable to keep his lay brethren on the right track. As regards the profession, it is clear that more medical men are wanted in the House, and they should go there charged authoritatively with the defence of professional interests. As a suggestion pure and simple, why should not the British Medical Association maintain a medical member, regardless of his party politics? Would it be possible for the Medical Defence Union to send a representative to the Commons? Or, failing that, would it be feasible for a combination of protective organisations conjointly to pay the expenses of a member of Parliament?



### Why Help is Needed.

THERE are various reasons why active monetary support is needed for anything like adequate representation of medical men in Parliament. In the first place, as a rule, the medical man has to make his living by the practice of an exacting and laborious profession. If he lives in the country, it is only possible for him to attend to his duties in the House by practically abandoning his medical work. If in town, he can attend only by an expenditure of personal energy that lays an undue tax upon his constitution. For these and other reasons, it is fairly self-evident that if the medical profession resolves upon the necessity of parliamentary representation in its collective capacity, that end can be attained only by the subsidy of men in the profession. Under present conditions the medical man in Parliament is apt to become so swallowed up in politics that purely professional matters have little interest for him. Fortunately there are exceptions, such as the late Dr. Cooper and the late Dr. Hutchinson, and the present Sir W. J. Collins. In the Upper House Lord Lister has upon occasion exerted decisive influence, and some day we hope the counsels of the non-elective chamber may be strengthened by a further accession of medical peers.

### The Press and Quackery.

At Shoreham, last week, an inquest was held into the circumstances attending the death of an elderly man from blood-poisoning, which it was alleged had supervened upon the application of a "corn cure" to one of his toes. The medical attendant stated that he found ulceration which had extended into a joint. The toe was amputated, but gangrene of the foot followed, with acute and fatal septicæmia. The man was in bad health, and the "corn cure"—a preparation containing salicylic acid—was strongly corrosive, and capable of extensively damaging tissues in an elderly and unhealthy subject. This case would barely deserve notice but for the fact that in the reports in the local papers the name of the "corn cure" is suppressed. It would be interesting to know whether it is advertised without any warning of its dangers in any of these newspapers.

## LEADING ARTICLES.

### THE DAY OF THE PROVINCIAL MEDICAL SCHOOLS.

THE curious chaos of conflicting interests whereby the candidate for medical qualification is faced with many portals of admission, has resulted in various tides of popularity, now in this and now in that direction. The General Medical Council, in the half-century of its existence, has ensured a fair general standard of examination knowledge in all cases. There is reason to believe, however, that in some instances the requirements of the examiners are abnormally high, and the extent and technical nature of their questions such as it would be impossible to answer, except by students crammed for the occasion with undigested masses of other men's knowledge. The University of London not only sets an abnormally high standard, but also imposes a matriculation with conditions that must infallibly frighten off the timid and exclude many sound candidates. So far as the London medical schools are concerned, the lack of a university

degree on reasonable terms has given a great advantage to the universities in other parts of the Kingdom. Parents and students have recognised more and more generally the fact that, with an equal expenditure of time, labour and money, it is possible to get a medical degree in a local university which equips the possessor for the battle of professional life more efficiently than the mere diploma of any College or Hall, no matter how ancient or distinguished. Moreover, a graduate of a university has a voice in the management of his own affairs, whereas the diplomate of the lower station is absolutely excluded from taking any part in the government of the corporation to which he belongs. The college takes the money, gives him a diploma, and thenceforth has no further concern with his welfare or with the protection of his interests. The result of so selfish and antiquated a policy of class government must sooner or later be the abandonment of the qualifying bodies which cling to mediæval traditions for the healthier and more practical organisation of the modern provincial university. Comment of this kind may seem harsh, but fair words will not fill depleted class-rooms, and it is in the interests of the diploma-granting corporations themselves that candid criticism is demanded. The key to the present situation is probably to be found in the medical degree granted on reasonable terms, and the best chance of survival of the ancient Colleges and Halls will be in co-operating with the universities in a conjoint degree. In other words, the stress of evolution in medical education is inevitably tending towards the only rational solution of its complex problems—namely, a one-portal qualification. The popularity of the provincial universities has not been lessened by the indifference shown by the colleges to the interests of their *alumni*. The fellows of the Royal College of Surgeons of England have steadily refused the members any voice in the government of the corporation. The Royal College of Surgeons of Edinburgh similarly excludes its licentiates, while it refuses to institute a membership diploma which would place those licentiates on a footing of equality with the diplomates of other colleges who are their competitors in professional life. All the diploma-granting corporations nominate their representatives on the General Medical Council, where they form the majority. It may be safely said that during the fifty-one years of the Council's existence the voice of these corporation nominees has only on rare occasions been raised in the interests of the profession generally. If the Colleges and Halls wish to regain their waning popularity, one of the most promising steps in that direction would probably be to hand the election of the college representatives on the General Medical Council to the general body of their diplomates, regardless of rank. Another vital point would be co-operation with local universities in the granting of degrees and the alteration of constitution so as to make their government democratic instead of oligarchic. If some such reforms were effected the various medical schools would be relieved of the handicap of accidental and extraneous attractions, and the competition of the

many corporations would be narrowed to a basis of pure academic merit, a result that would be hailed with delight by many to whom these ancient bodies are endeared by personal affection, no less than they are revered for the traditions of their noble and time-honoured history.

### CURRENT TOPICS.

#### Christian Science at the Church Congress.

IN its relation with disease and suffering, the first function of religion is to bring into the sick room fortitude, patience and consolation. No enlightened Christian sect attempts nowadays to go beyond this, and, least of all, to undertake the treatment of disease in imitation of the thaumaturgy of the Middle Ages. Certain small parties of clerics of various denominations, including the Church of England, have, however, latterly displayed an inclination to emulate the example of the Christian Scientists in attempting, by spiritual means, the cure of diseases of the nature of which they confess their complete ignorance. In view of this fact, Mr. Stephen Paget has put the Church under an obligation by his trenchant exposure of Christian Science, in his paper at the Congress on Thursday last. In preparing his book on Christian Science, Mr. Paget inquired into the alleged healings of grave organic diseases, and he found not one authenticated case. He pointed out that Christian Science does not publish her failures. He had in his possession a long list of her killed and wounded; he wished that it could be nailed to the doors of all her churches. Seeing the gross and shameful malpractices of Christian Science, the long trail of pain and of death that she left behind her, her impudent concealment of all her failures and worse than failures, and her mad resolve never to acknowledge any difference between backache and spinal caries, between functional paralysis and organic paralysis, between indigestion and cancer of the stomach, between pain in the breast and cancer of the breast, and her frequent cruelty, especially to small children—seeing all these abominations, they ought to prevent even the faintest shadow of them from falling across the Church. It is satisfactory to note that not one voice was raised from among the large audience to combat or protest against Mr. Paget's scathing indictment.

#### Tuberculosis in Army, Navy, and Post-Office.

IN answer to a question in the House, last week, it was stated, on behalf of the Postmaster-General, that in the year 1908 90 men and 20 women were discharged from the Post Office suffering from tuberculosis. At the same time it was admitted there was no official arrangement to provide them with treatment, but every established official retiring on account of ill-health was entitled either to a pension or a gratuity. The same lamentable want of special provision for discharged consumptives prevails in the military and naval services. Now, if the State be serious in its endeavours to solve the great national problem of how to extirpate tuberculosis, surely here is an opening which appeals to the moral as well as the economic con-

science. Why should not the Government accept the responsibility of caring for those who have contracted consumption during their term of service, just as it would for disability, due to some stray bullet or accidents arising from occupation? To turn out into the streets, as it were, a regiment of consumptive soldiers, sailors and post office employees is to flout Providence and to run counter to modern medical teaching. By the very circumstances of the case many of these unfortunate sufferers will be unable to make a living, and so will be under the conditions of poverty most favourable to the spread of their malady. Surely it is the bounden duty of the State, in view of our present scientific medical knowledge of tuberculosis, to provide special treatment for all her servants disabled by that universal and preventable scourge.

#### The Mummified Remains at Stamford.

FURTHER developments have arisen in connection with the recent discovery at Stamford, on the site of the Black Friars' Monastery, of a leaden coffin containing embalmed human remains. Some weeks ago we noted the unearthing of an ancient coffin at Stamford, on the site of an old Priory, and the subsequent burial of the body in a field. The sequel shows a more reverent treatment of the remains, for it is announced, on the authority of the *Times*, that the Home Secretary has ordered the re-interment of the remains in consecrated ground, and permission has been granted for a medical man to examine the body. Dr. G. Boyd, the Medical Officer of Health for Stamford, has ascertained that the remains were those of a man. The flesh was in an almost perfect state after having been buried for over 500 years, and the features were easily distinguishable as those of an elderly priest. It was decided that the body is that of John Staunford, who was prior of the Black Friars at Stamford in the latter part of the fourteenth century. The remains were afterwards replaced in the leaden shell, which was enclosed in a wooden coffin, and removed to St. Augustine's Roman Catholic Church at Stamford, where a *requiem* service was held. Later the body was reinterred in a grave specially purchased in the portion of the local cemetery reserved for Roman Catholics. A paper was placed inside the coffin recording the incidents of the discovery and re-interment of the remains.

#### Health Visitors in Aberdeen.

CERTAIN allegations made by Trades Unions as to defective qualifications of health visitors in Aberdeen have served to elicit an official statement demonstrative of the admirable work that has been carried out by these ladies since the first was appointed in 1903. They have all been carefully selected, not only with regard to training and certificates, but also with regard to possession of tact, sympathy and address. A good general education has been deemed desirable, and it has been recognised that a woman of refinement is needed to win the confidence and respect of the poor mothers she strives to influence. Although there has been difficulty in obtaining visitors with previous experience—the sphere of work being so

new, and Aberdeen being one of the first towns in Scotland to enter upon this work—there has been no difficulty in securing the services of women with the highest personal and technical qualifications—trained nurses, mostly with maternity hospital experience. In Aberdeen, as throughout the whole Kingdom, there has been within recent years a remarkable reduction in the mortality at every period except the infant period of life; but this latter has steadily decreased since the appointment of health visitors. Here, as everywhere, the fact is made plain that the waste of infant life is mainly due to the ignorance—often the perfectly innocent ignorance—of the mothers. They have never been taught, they have no means of learning the simple rules for maintaining their own health and that of their babies; they destroy their infants, in most cases, by bad feeding alone. In Aberdeen there now exists a "Mothers' and Babies' Club," where instruction and help is provided in the care and feeding of infants, the health visitors and the Health Department co-operating with the Committee in carrying on this good work. Infantile mortality is, of course, a measure of the injury inflicted upon the constitutions of many of those that survive after going through an ordeal of malnutrition and disease. To diminish waste of infant life is thus, at the same time, to ensure improvement in the national physique.

#### 'Athletics and Health.

EARLY in the present year some debate arose as to the effect of athletics, in particular, long-distance running, on health, certain rather hasty members of the medical profession having thought fit to pronounce public condemnation. The discussion, therefore, at the Belfast meeting of the British Medical Association is of special interest, since the men taking part therein—such as Dr. Tyrrell Brooks, of Oxford, and Dr. Clement Dukes, of Rugby—unlike many of those who signed the famous condemnation, are specially qualified by experience to speak with authority. While, therefore, as Dr. Dukes shows, there are certain easily avoided risks in long-distance running, on the whole the dangers arising from athletic exercises of all kinds are far more than counterbalanced by the advantages. As regards the risks, they are, after all, slight, and seldom, if ever, is there any permanent injury left. We are glad to note that some of the speakers criticised the attempt to substitute physical exercises for games and competitions. "The more hazardous the game," says Sir James Barr, "the better for the development of the character of the individual." We are not sure that this dictum is entirely true, since it seems to justify a substitution of brutality for skill and combination, such as has taken place in the American development of football. The debate as a whole is a triumph for the existing vogue of athletics, and we must express our satisfaction that grandmotherly persons with fads have not succeeded in depriving our youth of one of its most valuable institutions.

#### Water and Sewage of Dublin.

It was only last week that we had to comment on the extraordinary muddle in the investigation

of the Clontarf outbreak of typhoid fever. At the present time the city of Dublin is subjected to two grave dangers—the breakdown of the drainage system and a shortage in the water supply. It is only a few years since a very large sum of money was spent in establishing a new main drainage system, designed to obviate the necessity of using the Liffey as an open sewer. A week or two ago it was discovered that one of the main drains of the south side of the city was quite blocked with a deposit of several thousand tons. As a result, while the process of cleansing is going on, the sewage is discharged into the Liffey in its course through the city, and the odours during the recent dry weather have been all but intolerable. Whether this failure was due to an essential flaw in the original plans of the main drainage system, or to culpable neglect on the part of those responsible for the supervision of the system in work, we are at present unable to state. While the citizens are smarting under this head, they are threatened with another, even more grave. It is stated that the water supply is running dangerously low, considerably more than half the normal reserve having been exhausted. At present, at the normal rate of consumption, there is barely water to last two months. Of course, it may be pointed out that we are not likely to have another month's dry weather, but it takes a considerable time for rainfall to make itself felt in the Roundwood reservoir, and the margin of time is becoming narrow.

#### Uncleanly Heads in School Children.

THE Medical Officer of Barnsley, Dr. Sadler, has recently submitted to the Education Committee a report in which he deals with the subject of "Uncleanly Heads in School Children." Out of 3,794 children examined he found 3,297 had decayed teeth, 2,238 had something wrong with their nose and throat, and 1,170—of whom 974 were girls, had dirty heads and skin diseases, and of the whole number only 117 were badly nourished. 1,106, nearly one-third, had defective vision, 243 some form of ear disease and 419 defective hearing; the heart was defective in 188 cases and the lungs in 252 cases, 181 were suffering from some form or other of tuberculosis, 168 showed signs of rickets. One child had scarlet fever, one mumps, twelve ringworm, one chicken-pox and 27 scabies. Amongst the girls dirty heads, that is to say, heads infected with pediculi, were the exception rather than the rule. Dr. Sadler remarked that the proportion of girls with dirty heads was so large that it seemed to him that possibly the simplest plan would be to institute separate desks for all girls with clean heads. In the percentage figures, it is probable that in any given class there will be found enough girls with clean heads to fill at least one form, and he thought it might be better to make it an honour to sit on the clean form, rather than make it a disgrace to be separated in class-rooms as dirty. The question of cloakroom accommodation is a difficult one, but Dr. Sadler entertains no doubt that children going to the elementary schools from careful homes, and with clean heads, do actually acquire vermin by putting their caps or hats on the pegs which had been used for the

caps or hats of dirty children. It is, perhaps, inadvisable to suggest a system of lockers for so large a number of children as are congregated at any given school, but it does seem feasible that each child should have a separate peg labelled with its name, and that it should be a punishable offence for a child to put its hat or cloak on the peg of another. This observation coincides with the experience of many hospital physicians who have to deal with out-patient children from the slums. Few heads indeed, if examined carefully under such conditions would be found free from ova pediculi. Under the Children Act the medical officer of health is invested with compulsory powers in the treatment of that class of case.

## PERSONAL.

THE PRINCESS OF WALES visited on Saturday afternoon the National Hospital for the Paralysed and Epileptic, Queen Square, Bloomsbury, and received a number of purses containing money given to and collected for the Jubilee Fund.

DR. MEACHEN, at the Institute of Hygiene last Thursday, spoke on the question, "What Shall we Eat?"

MR. E. C. ROBINSON, in his book, "In an Unknown Land," describes how he met Peary when the *Roosevelt* put in for whale meat.

SIR JOHN BYERS, M.D., has been elected President of the Natural History and Philosophical Society of Belfast for a second term of office.

LORD BRASSEY, Lord Warden of the Cinque Ports, opened the newly-erected General Hospital and Seamen's Infirmary at Ramsgate on last Thursday afternoon.

PROFESSOR ALEXIS THOMSON, recently appointed to the chair of Surgery in Edinburgh University, delivered his Introductory Lecture to his students in the M'Ewan Hall.

AT the annual meeting of the British Dairy Farmers' Association Lord Belper occupied the chair, and moved the adoption of its exceedingly brief and businesslike report.

LADY ADELA MOUAT, widow of Surgeon-General Sir James Mouat, Honorary Surgeon to Queen Victoria, and head of the General Field Hospital at Sebastopol, died on October 7th.

PROFESSOR HENRY KENWOOD will deliver a public introductory lecture at the Chadwick Training Course in School Hygiene, University of London, on "What Hygiene Demands of School Teachers."

LORD JUSTICE FLETCHER MOULTON was recently entertained at dinner by the medical profession of Leeds, where he had delivered the Opening Address of the University School of Medicine in the morning.

We regret to learn that Sir William Thomson, C.B., Surgeon-in-Ordinary to the King and a past President of the Royal College of Surgeons in Ireland, is lying seriously ill at his residence, St. Stephen's Green, Dublin.

ON October 6th the Lord-Lieutenant of Norfolk (the Earl of Leicester) presided at St. Andrew's Hall, Norwich, over a large and influentially attended county meeting, called in support of the extension fund of the Norfolk County Hospital.

It is announced that Dr. Shiwopiszev, of the Russian Government Lymph Institution at Orel, last week laid a wreath on the tomb of Jenner, the discoverer of vaccination, in Bristol parish church. His journey from Russia was made for the purpose.

AFTER many experiments, Dr. Goodall, of the Middlesex Hospital, has found that, as a general rule, cultured and educated people prefer chocolate-coloured foods; uneducated people like yellow-coloured foods; children of all classes have a fondness for pink foods.

AT the annual meeting of the Royal Academy of Medicine in Ireland, held on Friday last, Sir Charles Ball, Regius Professor of Surgery in the University of Dublin, was elected President of the Academy. The results of the remaining elections will be found in another column.

THE DEAN of the Medical Faculty of the Liverpool University (Dr. Monsarrat) presided on October 5th in the Arts Theatre at the opening of the medical session, when the Introductory Address was delivered by Mr. Charles A. Ballance, M.V.O., M.S., Surgeon to St. Thomas's Hospital, London.

LADY DUDLEY, the wife of the Governor-General, delivered an address in Brisbane strongly advocating the extension to the country districts of the movement for providing trained nurses for the poorer class of patients. Since it was heard much interest has been aroused in the subject.

THE PRIME MINISTER is to be asked by Sir William Collins whether he has received any communications from the medical schools of London respecting the standard of the medical examinations for London University degrees, and what action the Government propose to take regarding them.

IT is announced that the Glasgow University and Glasgow Victoria Infirmary are each to benefit to the extent of £10,000 from the estate of the late Dr. Robert Pollok. His will contained no bequest, but separate writing was found suggesting that his sisters, the residuary legatees, should give £10,000 for the endowment of a special ward in the infirmary and £10,000 for the endowment of a University lectureship in materia medica.

FLEET-SURGEON C. G. MATTHEW, C.B., who has been placed on the retired list at his own request, was recently acquitted by a court-martial of charges arising out of some unpleasantness which occurred with Commander R. Walters, of the *Fisgard* training establishment. Fleet-Surgeon C. G. Matthew joined the Service in February, 1889, and was present at the bombardment and capture of the Sultan of Zanzibar's palace.

F. M. SANDWITH, M.D., Gresham Professor of Physic, will deliver four lectures on "Some Medical Aspects of the Poor-law Commission," on Tuesday, October 26th, Wednesday, October 27th, Thursday, October 28th, and Friday, October 29th, 1909. The lectures for the present term will be delivered at the City of London School, Victoria Embankment. The course is free to the public, and begins each evening at 6 o'clock.

# A CLINICAL LECTURE

## ON

### DECHLORINATION IN THE TREATMENT OF CHRONIC BRIGHT'S DISEASE.

By J. STEWART FOWLER, M.D.Edin., F.R.C.P.,

Physician to the Royal Hospital for Sick Children, Edinburgh.

GENTLEMEN,—The subject to which I wish to direct your attention this afternoon is the treatment of chronic Bright's disease by dechlorination. By dechlorination is meant the restriction of the amount of sodium chloride in the diet to the smallest possible limits. This method of dieting was introduced by Widal in 1903 as a means of treating what is one of the leading symptoms of chronic Bright's disease, viz., dropsy, and in a number of cases it gives extremely good results. The class of case for which it is most suitable is chronic parenchymatous nephritis associated with dropsy, and it will not infrequently be found that patients who are bed-ridden from oedema, which may have resisted all ordinary treatment with hot packs, diuretics, purgatives, etc., respond quickly to a salt-free diet, copious diuresis setting in, the oedema vanishing and remaining more or less permanently absent so long as the salt-free diet is adhered to.

I propose first to explain the theory of dechlorination; second to cite some illustrative cases; third to describe the method as it is carried out in practice.

Common salt is one of the most widely distributed substances in Nature. It is contained in every animal and vegetable tissue; all the organs of the body are bathed in saline fluid. It is necessary for the health of the cells that the concentration of the saline fluid by which they are surrounded and permeated should remain fairly constant. The so-called "physiological salt solution" is neutral towards the most delicate structures, whereas weaker or stronger solutions are harmful. We utilise this fact daily in employing saline injections either into the bowel or subcutaneously.

It has long been known that in many forms of nephritis the excretion of salt by the kidneys is interfered with. This used to be looked upon as secondary to the existence of oedema, the salt being retained in the body to form an isotonic solution in the water in the tissues. Widal's observations, however, show that the reverse is the case. The primary event is the failure of the kidneys to eliminate salt, and the dropsy is caused by the retention of water in the tissues in order to hold it in isotonic solution, or, in other words, to maintain a constant osmotic pressure. Proof of this will be given by the charts which I shall show.

The quantity of salt which a healthy man excretes depends on the amount he eats. The amount eliminated daily is not a measure of the daily needs of the organism, because in the fasting condition the daily excretion of sodium chloride is only about .6 gramme. This, therefore, represents the total amount actually lost by the tissues, and which requires to be supplied in the food. Salt is eliminated by the bowel and skin as well as by the urine, but unless there is profuse sweating or diarrhoea the quantity got rid of by the first and second channels is negligible. Normally, the urinary chlorides are about 95 per cent. of the total, and reach, on the average, 15 to 20 grammes daily. In an ordinary mixed diet there is about 17 grammes of salt, the great part of which is added salt. A

diet sheet can readily be constructed, the constituents of which yield abundant calories, and contain proteid, fat, and carbohydrate in the normal amounts, which yet contain only 1.5 to 2 grammes of salt—more than enough to replace the daily tissue loss—and there is no question that on a diet of this kind health may be maintained for a long, if not indefinite, period.

Contrary to what might be anticipated, privation from salt (as is involved in such a diet) is not injurious to health. The practice of eating salt, though almost universal, and not restricted to the human species, appears to depend solely on custom and on the gratification of the appetite. The infant, during its period of greatest growth, requires no more salt than the gramme and a half which is yielded by the mother's milk. Among certain races, notably pastoral and nomadic peoples, salt does not enter into the dietary, and, on the whole, it may be said that the desire for salt is less, both in man and animals, in proportion as flesh preponderates over vegetable in the diet. Historical instances of disease caused by lack of salt do not stand scrutiny. It is said that during the siege of Metz the troops suffered from this cause, whereas they obtained plenty of salt from a salt spring which was used to prepare their food, but had no powdered salt with which to disguise the repugnant taste of the flesh of the famine-stricken horses to which they were reduced. (Widal.) Salt, therefore, is not so much a necessity as a luxury, and a salt tax, though one of the oldest of fiscal exactions, in so far conforms to the theories of modern political economy.

Normally, the organism is in a state of chloride equilibrium, the amount excreted equalling that ingested. When a healthy subject is put on a salt-free diet, he for two or three days thereafter eliminates more chloride than he receives, then the chloride balance is established. When salt is restored to the food the amount excreted does not at once rise; for two or three days some is retained in the tissues, and then equilibrium is re-established. Variations in the amount of chloride in the body are accompanied by variations in the amount of water. Retention of chlorides is associated with diminished flow of urine and increase in weight; elimination of chlorides with diuresis and a fall in weight. The amount of floating chloride in the tissues is about 12 grammes in 1.5 to 2 kilos. of water. The power of eliminating chlorides varies considerably in different individuals, and some cases of dropsy due to the habitual excessive consumption of salt by otherwise healthy persons have been recorded. These, of course, are immediately cured if the cause is removed.

In many cases of Bright's disease the permeability of the kidneys to salt is greatly impaired, water is in consequence retained, and oedema results. The relation between the hydration of the tissues and salt retention in nephritis was first demonstrated by Widal, in a classical case, of which I now show the chart. The patient was under observation for 62 days. Nine sudden changes were made from a salt-containing to a

salt-free diet, or *vice versa*, retention of chloride being provoked four times, dechlorination five times. Four times there was hydration of the body, and five times dehydration. In this case the kidneys had considerable power of eliminating chlorides—much more than in the first of my own cases, for instance.

This theory of the relation of chlorides to nephritis has been amplified in several directions: in particular, Widal has tried to show that some of the symptoms of uræmia are related to salt retention, others to retention of nitrogen. This question, however, may be left aside here. Before passing to cite cases, I shall only allude to two further matters:—

1. *The Pre-œdematous Period.*—You will notice in the chart shown that œdema only becomes manifest after the patient's weight has already risen considerably. During the preliminary gain hydration is affecting the internal organs before it involves the subcutaneous tissues. In the same way the weight continues to fall after all visible œdema has been removed. Thus the disappearance of visible œdema does not show that the viscera have recovered. We must wait for this until the body weight has reached its minimum.

2. *Variations in Renal Permeability to Salt.*—Widal's patient had considerable power of eliminating salt. In some cases, however, this power may be almost *nil*. After a patient has been dechlorinated, measured quantities of salt should be added to the diet, his weight being ascertained daily the while, in order to ascertain the tolerance of his kidneys. In some cases it will be found that whereas before dechlorination he could eliminate very little, after dechlorination the kidneys have regained some of their permeability. This is apparently due to the removal of the œdema of the kidneys, which occurs as a part of the general hydration of the viscera, and in itself directly impairs the renal permeability. On the whole, dechlorination tends to diminish the percentage of albumin in the urine, probably simply by causing diuresis.

Sodium chloride is apparently the only salt which needs to be considered in relation to œdema, and Widal seems to regard chloride retention as the only cause of the dropsy of Bright's disease. Most authorities, however, do not accept this simple theory as explaining all forms of œdema. However this may be, there is no doubt that in its practical application the theory of salt retention is a valuable guide to treatment.

In illustration of the effect of dechlorination, I give an account of a case recently under treatment. I have to thank Dr. Gordon, my House Physician, for the careful estimation of the chlorides in this and in other cases.

L. C., æt. 7½, has suffered from chronic Bright's disease for four years, during which time he has several times been an inmate of the Sick Children's Hospital. He comes in from time to time with more or less œdema, scarcity of urine, and a large quantity of albumin. With the exception of the first attack and the present one, he has usually improved within a few days, under ordinary treatment, the œdema disappearing, the urine becoming abundant, and the albumin falling to a mere trace. He was admitted to hospital this year on April 27th, with the usual symptoms. Apart from moderate general œdema and albuminuria none of the other systems of the body were affected. He was treated in the ordinary way with purgatives, hot packs, and saline diuretics and a milk diet, and by the 7th of May was free from œdema, having lost 3½lbs. in weight. His diet was increased so as to include chicken soup, bread, farinaceous food, and a little fish. About the 15th

of May his weight began to go up, and the quantity of his urine diminished, and on May 20th he became visibly œdematous. Notwithstanding a renewal of the previous treatment the œdema became much worse, his urine was loaded with albumin, and he was passing only .7 gramme of chloride daily. On June 1st a salt-free diet was begun, including one pint of milk daily. His weight was then 51½lbs. (see chart). By June 6th his œdema had disappeared, and two days later his weight had fallen to 42½lbs., a loss of 8½lbs. in eight days. Along with this dehydration, the chloride excretion rose considerably above the quantity ingested—to as much as 7 grammes on one occasion. By June 21st, chloride equilibrium was established, and from that date until the end of the month his weight remained fairly stationary (the gain of 1lb. being probably due to his improved nutrition), his daily excretion of chlorides being between 1 and 2 grammes, corresponding fairly well with the quantity in a salt-free diet.

On July 2nd, with the view of ascertaining the degree of permeability of his kidneys to chlorides, 5 grammes of salt were given, and continued daily for three weeks. The immediate result was to send up his excretion of chloride to 5 and 6 grammes daily, and it was thought that his kidneys were sufficiently permeable to enable him to maintain equilibrium on this quantity. This, however, did not occur. His elimination of chlorides again fell to between 1 and 2 grammes, his weight rose, and by the middle of July œdema had reappeared.

On July 22nd salt was withdrawn from his diet. The change did not produce an effect at once, as on the former occasion. His elimination of chlorides remained low, falling during the first week in August to less than .5 gramme daily; he was retaining at least a gramme per diem, and his weight continued to rise until by August 9th he turned the scale at 55lbs. Then he suddenly began to eliminate large quantities of chlorides, he became dehydrated, and his weight fell to its former level by the 19th. He continued to excrete about 1 to 2 grammes of chloride daily, and was discharged from hospital in the early part of September.

The course of the case during the time he was under observation is shown on the chart.

Unlike some other forms of restricted dietary, a salt-free diet is easy to arrange, and is seldom distasteful to the patient. I have not yet met with anyone who really seemed to feel the want of the accustomed condiment, and most of the adult patients have relished their food, and found the new diet a pleasant variation from the milk and farinaceous food on which they were previously living. The Table gives the percentage of salt in a number of different articles of food.

	Na. Cl. per 1,000
Milk ... ..	1.5—2.5
Eggs ... ..	1.6
Fresh butter ... ..	1.
Bread ... ..	8.—10.
Meat ... ..	.3—1.
Fresh-water fish ... ..	.48
Sea fish ... ..	5.4
Flour ... ..	.17
Rice ... ..	.02
Potatoes ... ..	.57
Peas ... ..	.65
Lentils ... ..	2.3
Fruit ... ..	.30—.2

Milk contains from ¼ to 1 grain per oz., so that a patient on a diet consisting solely of milk (50 to 60 ozs.), may be taken from 37 to 60 grains (2½ to 5 grammes) daily. When a patient suffering from Bright's disease is restricted to milk he is



thus actually being dechlorinated, and probably part of the value of a milk diet depends on its poverty in chlorides. Fresh butter and eggs, though they contain a relatively large amount of salt, are used in comparatively small quantities, and are therefore negligible. Bread, as ordinarily prepared, contains a large quantity of salt, and

have not noticed any unpleasant symptoms from the sudden change. As a rule the œdema at once begins to diminish, and quickly disappears, along with a free diuresis, but in some cases a week or two may elapse before this occurs. In the case described, where the second dechlorination cure was long in producing its effect, we tried reducing

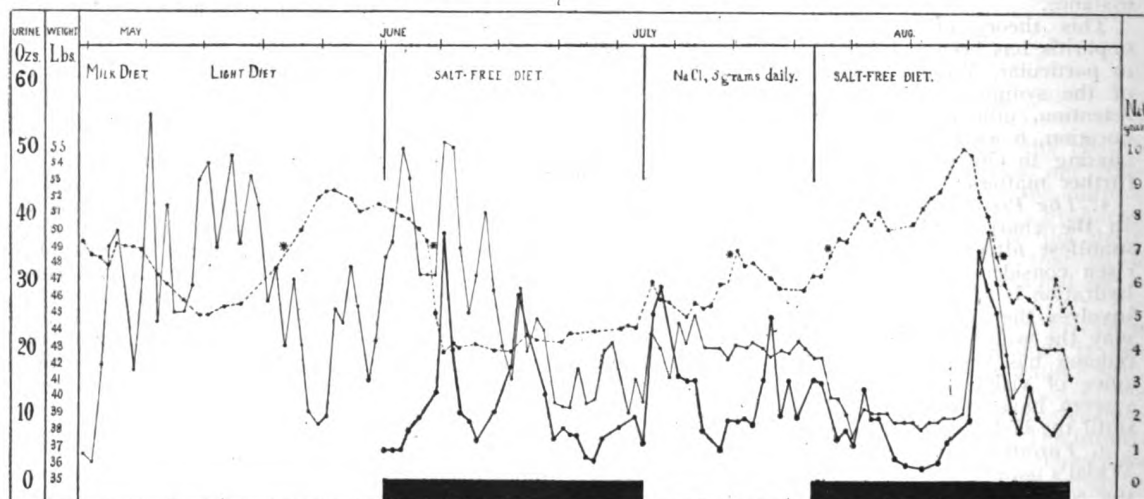


Chart of L.C. Weight, ..... Urine, ..... Chlorides, ..... \* = appearance and disappearance of œdema.

patients subjected to a salt-free diet are debarred from eating it. There is, however, no difficulty in getting bread specially baked without the addition of salt, and this can be supplemented by home-made scones and cakes. Meat, game, poultry, fruit, and cereals contain very little salt, as also do most of the ordinary vegetables. Salt-water fish contains a quantity of salt. When we come to apply these facts to practice we construct a diet according to the following rules:—

1. No salt is to be used in cooking, nor is any to be eaten at meal-times.
2. Ordinary bread, including cakes and scones from the baker, fish, except fresh-water fish, salt butter, cheese, all forms of dried, smoked, salted, or otherwise preserved food, such as tinned meat, bacon, dried fish, and the like, and sauces and pickles must be avoided.
3. Not more than a pint of milk should be taken in the day.
4. Soups made from ordinary meat stock contain large quantities of salt. Without this they are unpalatable. The soup of a patient undergoing a strict diet should be made from vegetables, with a milk stock.
5. Apart from these restrictions the patient may eat what he likes. He may have from a quarter to a half pound of meat or its equivalent as poultry or fresh-water fish per day, and vegetables, cereals, one or two eggs, etc., as his appetite demands. Tea and coffee are not prohibited.

The liberal dietary which is thus possible has two advantages in addition to the favourable effect which it may be expected to exert on the œdema:—(1) It is much less monotonous than the "light diet" which is often the food of the chronic nephritis patient; and (2) the general health and nutrition of a patient who has hitherto lived chiefly on milk often improve greatly.

I have hitherto tried this salt-free diet chiefly in cases of chronic Bright's disease with œdema, and have seen no bad effect from the comparatively large amount of nitrogenous food it contains. I have always begun a strict diet without any preliminary diminution in the salt in the food, and

the proteid in the diet, and soon after there was diuresis and disappearance of the dropsy, whether or not this was merely coincidence I do not know.

In patients treated in this way it is not necessary to estimate the urinary chlorides. The progress of the case can be judged of by regular weighing, or, when this is impracticable, by measuring the urine and noting the disappearance of the œdema. When the weight has become stationary or (when the patient is not being weighed) a fortnight or so after the disappearance of all visible œdema, a little salt may be added to the diet by way of experiment, and the effect on the weight noted. The addition which is most grateful is some ordinary bread. Adult patients, however, become so habituated to this diet, and so conscious of the good it does them, as not to be anxious for any relaxation of it. I have had one case on a strict diet for six months, and she has no desire to change; another patient has been on a partially salt-free diet for a year and a half.

NOTE.—A Clinical Lecture by a well-known teacher appears in each number of this journal. The lecture for next week will be by W. Langdon Brown, M.A., M.D. Cantab., F.R.C.P., Physician to the Metropolitan Hospital; Medical Registrar and Demonstrator of Physiology and Morbid Anatomy, St. Bartholomew's Hospital. Subject: "Sudden Death."

## ORIGINAL PAPERS.

### NOTES ON

### HÆMORRHAGIC DIPHTHERIA.

By J. D. ROLLESTON, M.D., B.Ch. OXON,  
Assistant Medical Officer to the Grove Hospital, Metropolitan  
Asylums Board, London.

*Definition.*—In the present paper the term hæmorrhagic diphtheria is applied to those cases in which in addition to other signs of malignancy hæmorrhages appear in the skin at an early stage of the disease, with or without hæmorrhages from the mucous membranes.

The insertion of the words "at an early stage"

has been made so as to exclude cases of purpura occurring in convalescence from diphtheria such as have been described by Buckley, (a) Goodall, (b) and Barlow. (c) The qualification "in addition to other signs of malignancy" has been used because petechiæ may sometimes develop at the injection sites in cases which are not remarkably severe. These lesions which are usually scanty and minute have no evil significance. Cases in which epistaxis alone occurred, though accompanied by other features of malignancy, have not been dignified with the title of hæmorrhagic diphtheria, nor has the term been applied to malignant cases in which hæmorrhage occurred from beneath the faucial membrane alone.

It is sometimes difficult to determine whether a hæmorrhage is spontaneous, or is due to some slight mechanical cause. It is perhaps best to follow Sevestre, (d) who maintains that the lesion is always disproportionate to the local agent. Thus a bruise may appear over the knee after a light percussion of the extensor tendon, or over a rib after auscultation of the chest.

**Frequency.**—The present paper is based on 1,550 cases of diphtheria which have been under my care at the Grove Hospital in the course of the last six years. Of these, 78 or 5.03 per cent. were hæmorrhagic.

**Classification.**—The cases have been divided into two groups. A. Those in which the hæmorrhages involved both the skin and the mucous membranes (53 cases). B. Those in which the skin only was affected (25 cases).

**Age and Sex.**—23, or 4.1 per cent. occurred in the first quinquennium; 50, or 7.02 per cent. in the second; and 5, or 3.4 per cent. in the third. The oldest patient affected was aged 12 years, though 167 of the 1,550 were above that age. 31 or 4.2 per cent. were males; 47 or 5.7 per cent. were females.

**Seasonal incidence.**—The following figures show that hæmorrhagic cases are almost equally frequent at all periods of the year. Thus 20 or 4.4 per cent. occurred in the first quarter, 14 or 6.03 per cent. in the second, 13 or 4.1 per cent. in the third, and 31 or 5.6 per cent. in the fourth.

Table I. shows that with two exceptions the annual percentage of hæmorrhagic cases has remained practically the same since 1902. The year 1903, for which the Grove Hospital diphtheria case mortality was only 6.0 per cent., was exceptional for its small number of malignant cases. The patients of 1908 cannot fairly be compared with those of the other years, since they represent an unusually large proportion of young children.

TABLE I.

Year.	Total number of cases.	Hæmorrhagic	
		cases.	Percentage.
1902	168	10	5.9
1903	318	9	2.8
1904	200	11	5.5
1905	187	10	5.3
1906	306	16	5.12
1907	295	15	5.08
1908	76	7	9.2
	1550	78	

**Previous health.**—Hæmorrhagic diphtheria in the present series did not show a special tendency to attack weakly children, or those debilitated by a recent illness, as some writers have noted. In none of the cases was any other disease, such as scarlet fever or measles co-existent with diphtheria, 13 had had no previous illness whatever. The others had had one or more of the acute exanthemata, or a previous history of sore throat or bronchitis.

**Character of diphtherial attack.**—In all the cases the faucial membrane was extensive, and one or more of the characteristic features of malignancy were present,

such as faucial and palatal œdema, foetor, disproportionate adenopathy, pitting of the skin over the glandular swelling, and absence of, or a delay in, reaction to antitoxin. Sixty-eight cases, or 87.3 per cent., showed signs of nasal involvement either by membrane visible within the nasal fossæ or by profuse and thick rhinorrhœa. Only 4 had laryngeal symptoms. Two of them required tracheotomy. All 4 died. Enlargement of the liver appreciable during life was found in 32 cases out of 57 hæmorrhagic cases, in whom it was investigated, *i.e.*, in 51.6 per cent. as compared with a percentage of 7.4 among 1,170 diphtheria patients in whom a routine examination of the liver was made. A punctate rash on the knees described by Marfan (a) as characteristic of severe diphtheria, occurred in 11 out of 48 hæmorrhagic cases in which this sign was investigated. Albuminuria was present in every case in which a specimen of urine could be obtained. Complete suppression of urine for 24 hours or more before death occurred in 24 cases, and pronounced oliguria in another 8. With the exception of 39 cases who died of toxæmia during the acute stage, every hæmorrhagic patient suffered from paralysis. It is of neurological interest, as indicating the perturbation of the pyramidal system met with in severe diphtheria, that Babinski's sign was present in 17 out of 38 hæmorrhagic cases, *i.e.*, in 44.7 per cent., as compared with a percentage of 19.1 in a series of 636 cases of diphtheria in which this sign was investigated.

**Day of disease on admission to hospital.**—Table II. shows the day of disease on admission to hospital, which in all but 3 cases was the same as that on which antitoxin was first injected.

TABLE II.

		Percentage frequency among all cases admitted.	
		Cases.	
1st day	.. ..	0	0
2nd	.. ..	3	0.9
3rd	.. ..	14	3.4
4th	.. ..	22	6.8
5th	.. ..	20	9.6
6th	.. ..	10	9.6
7th	.. and later	9	7.5
		78	

Thus no hæmorrhagic cases occurred among those injected on the first day, the percentage among second day cases was small, and the frequency progressively increased with delay in administration of antitoxin. The diminished frequency of hæmorrhagic cases admitted after the sixth day is probably to be explained by the fact that only a small number of untreated hæmorrhagic cases survived after that date. Occurrence of hæmorrhages in those treated comparatively early is to be attributed to a precocious malignancy of the disease and finds a striking parallel in certain rare cases of syphilis in which early adoption of specific treatment does not prevent the disease running a severe and rapidly fatal course (*vide* MEDICAL PRESS AND CIRCULAR. 1., 1907, p. 307, in which I have reported a case of this kind). Of the three cases who had been injected before admission, one had received 2,000 units at home on the third day, was admitted on the fourth, and died on the ninth day of disease. The second had received 2,000 units on each of the sixth and seventh days, was admitted on the seventh, and died on the eleventh day. The third had received 1,700 units at home on the fourth day, was admitted the same day and died on the twelfth day.

**Relation to antitoxin.**—Table III. shows the total amount of antitoxin given in each case. As a rule injection was not made more than once daily, the maximum dose at one time rarely exceeding 24,000 units. The subcutaneous method only was adopted.

Comparative observations of intravenous injection

(a) *Lancet*, II., 1901, p. 132.(b) *Ibidem*, p. 1492, and "Guy's Hosp. Rep.," 1894, Vol. L., p. 91.

(c) M.A.B. Reports, 1901.

(d) In Comby's "Traité des mal. de l'enf." Tome 1, 1904, p. 112, art. Diphthérie.

(a) "Bull. et mém. de la Soc. Méd. des Hôp de Paris," 1902, p. 722.



hæmorrhagic diphtheria state that with the exception of two cases which lived till the 9th and 11th days after the appearance of hæmorrhages, all died within 48 hours, 30 dying within 24 hours. Antitoxin had been given in only 12 cases, 6 of which were moribund on admission. Similar testimony as to the rapidity of death in pre-antitoxin times is given by MacCombie. My own figures show that life in many cases may be prolonged, and in a few saved by the employment of large doses of antitoxin.

Short histories of the cases which recovered will now be given.

CASE 1.—Girl, æt. 5, admitted October 19th, 1902, on 4th day of disease. State on admission: Fauces very œdematous. Membrane covers enlarged tonsils, pillars and uvula, and extends on to soft palate. Much adenopathy. Profuse watery nasal discharge. Knee-jerks absent. 18,000 units.

5th day. Membrane as yesterday. Marked fœtor. Nasal discharge thicker, more profuse and sanious. Adenopathy increased. Bruise over right anterior superior iliac spine. 15,000 units. Adrenalin chloride solution m. v., 4 hourly.

6th day. Throat slightly cleaner. Two fresh bruises over lumbar vertebrae.

10th day. Throat clean.

11th day. General urticaria for one day only.

16th day. Heart shows triple rhythm. Irregularity of force and rhythm lasted till 45th day.

33rd day. Nasal voice.

41st day. Ciliary palsy lasting till 58th day.

43rd day. Late tonsillitis.

47th day. Squint.

54th day. Allowed to sit up.

She walked badly for some days after first getting up in clothes. On her discharge from hospital on the 79th day her knee-jerks were still absent.

CASE 2.—Boy, æt. 4, admitted December 29th, 1902, on 3rd day of disease. State on admission: Fauces and palate œdematous. Tonsils meeting and covered by membrane which invades soft palate. Profuse watery nasal discharge. Stertor and fœtor. Bruises on right shoulder and right leg. 18,000 units.

4th day. Membrane of same distribution. Fauces less œdematous. Bleeding from gums. Two bruises over lumbar vertebrae. 15,000 units. Adrenalin m. v., 4 hourly.

7th day. Albuminuria lasting till 28th day.

10th day. Throat clean.

13th and 14th days. General urticaria.

15th day. Cardiac dilatation lasting till 58th day.

27th day. Palatal and ciliary palsies.

5th week. Pharyngeal and diaphragmatic palsies.

6th week. Paralysis of vesical sphincter.

7th week. Labial palsy and weakness of neck muscles.

8th week. Up in clothes but paraplegic for more than a fortnight.

Discharged after 81 days' stay in hospital.

CASE 3.—Boy, æt. 5, admitted January 3rd, 1903, on 3rd day of disease. State on admission: Dirty membrane covers swollen tonsils, pillars, and part of soft palate. Considerable adenopathy. Profuse and thick nasal discharge. 18,000 units.

4th day. Uvula covered by membrane. Blood-stained nasal discharge. 18,000 units. Adrenalin chloride solution m. v., 4 hourly.

5th day. Numerous petechiæ at second injection site.

7th day. Epistaxis. Albuminuria lasting till 26th day.

9th day. Throat clean.

10th–13th days. Urticaria on trunk and limbs.

20th–43rd days. Cardiac dilatation.

21st day. Palatal palsy.

25th day. Ciliary palsy.

52nd day. Scarlet fever, without complications.

Discharged after 96 days in hospital.

CASE 4.—Boy, æt. 10½, admitted January 28th, 1903, on 6th day of disease. State on admission: Fauces and palate œdematous. Membrane covers both tonsils and pillars and part of soft palate. Pro-

consular neck. Marked fœtor and stertor. Petechiæ on neck and left upper arm. No knee-jerks. Albuminuria lasting till 35th day. 21,000 units. Adrenalin chloride m. v., 4 hourly.

7th day. Fauces as yesterday. Considerable œdema of cellular tissue spreading from neck down to the level of the nipples.

8th day. Bloodstained nasal discharge.

9th day. Numerous petechiæ scattered all over the abdomen. Large hæmatoma at second injection site.

9th–11th and 14th–16th days. General urticaria.

12th day. Cardiac dilatation and irregularity which persisted during stay in hospital.

13th and 17th days. Nausea and vomiting.

30th–57th days. Ciliary palsy.

39th–55th days. Palatal palsy.

60th day. Allowed to sit up.

Walking was unsteady for the first fortnight that he was up. On his discharge after 77 days in hospital the knee-jerks were still absent.

CASE 5.—Boy, æt. 3, admitted February 22nd, 1903, on 6th day of disease. State on admission: Fauces œdematous. Membrane on tonsils and pillars. Profuse nasal discharge. Albuminuria which persisted till 21st day. 18,000 units.

7th day. Profuse epistaxis. Bruises at injection site. Numerous petechiæ scattered all over abdomen and on legs, 27,000 units. Adrenalin chloride solution m. x., 4 hourly.

9th day. Bruises on right forearm. 12th–16th days. General urticaria.

12th–25th days. Vomiting associated with cardiac dilatation and irregularity.

Palatal and ciliary palsies developed in the 4th week and pharyngeal, diaphragmatic, and labial palsies in the 5th week. He was allowed to sit up on the 65th day, but it was another month before he could walk at all well.

He was discharged after 96 days in hospital.

CASE 6.—Boy, æt. 5½, admitted January 20th, 1904, on 5th day of disease. State on admission: Dirty membrane covers tonsils and pillars, part of posterior pharyngeal wall and soft palate. Sanious nasal discharge. Well-marked bilateral adenopathy. Petechiæ in right groin. 21,000 units. Adrenalin chloride solution m. v., 4 hourly.

6th day. Membrane of same distribution. Nasal discharge no longer blood-stained. 21,000 units.

7th day. Albuminuria which persisted till 35th day. 21,000 units.

8th day. Throat clean. Liver edge 2 fingers' breadth below costal margin.

14th–20th days. General urticaria.

14th–18th days. Cardiac irregularity.

20th day. Ciliary palsy lasting till 53rd day.

24th day. Palatal palsy, also gone by 53rd day.

49th day. Sat up. For 11 days after getting up he had some difficulty in walking.

Discharged after 79 days in hospital.

CASE 7.—Boy, æt. 2½, admitted February 18th, 1904, on 5th day of disease. State on admission. Old thin membrane on both tonsils, pillars, uvula and epiglottis. Watery nasal discharge. Albuminuria lasting till 50th day. 18,000 units. Adrenalin chloride m. v., 4 hourly.

6th day. Membrane of same distribution. Bruises on legs and on left posterior superior iliac spine. 21,000 units. Adrenalin chloride increased to 2 hourly doses.

7th day. Epistaxis.

8th day. Throat clean.

17th–18th days. General urticaria.

32nd day. Palatal and labial palsies.

35th day. Pharyngeal palsy. Cutaneous analgesia. Knee-jerks and abdominal reflexes lost.

38th day. Squint and ptosis.

48th–56th days. Cardiac dilatation.

When propped up on the 56th day well-marked palsy of the neck muscles was present. Loss of power in the lower limbs persisted for more than a month after getting up. Discharged after 99 days in hospital.

CASE 8.—Boy, æt. 1 year 10 months, admitted

July 4th, 1904, on 6th day of disease. State on admission: Membrane on both tonsils and anterior pillars. Profuse watery nasal discharge. Moderate adenopathy. 18,000 units. Adrenalin chloride m. v., 4 hourly.

7th day. Membrane of same distribution. Marked fœtor. Adenopathy increased. Epistaxis. 21,000 units. Adrenalin increased to 2 hourly doses.

8th day. Petechiæ on thighs. Bruise over lumbar vertebrae.

9th day. Bruise just internal to inferior angle of right scapula.

10th and 11th days. Epistaxis.

11th day. Slight enlargement of liver.

13th day. Throat clean.

14th day only. A few wheals of urticaria.

15th day. Albuminuria.

20th day. Palatal palsy.

24th-6th days. Cardiac dilatation and irregularity.

39th day. Squint.

56th day. Allowed to sit up. Paraplegia for a fortnight after first sitting up. No knee- nor ankle-jerks on his discharge after 81 days' stay in hospital.

CASE 9.—Girl, æt. 7, admitted December 14th, 1904, on 4th day of disease. State on admission: Fauces œdematous. Membrane covers tonsils, pillars and uvula. Some deposit on epiglottis. Proconsular neck. Bruise over left internal malleolus. 24,000 units. Adrenalin m. v., 2 hourly.

5th day. Membrane of same distribution. Fœtor marked. Bruise on right knee. 24,000 units.

6th day. Membrane still of same distribution. Albuminuria lasting till 33rd day. 24,000 units.

9th day. Punctate rash on knees.

10th-14th days. General urticaria.

11th day. Throat clean.

17th day. Palatal palsy.

22nd-42nd days. Cardiac dilatation and irregularity.

26th day. Ciliary palsy.

39th day. Labial palsy.

56th day. In clothes. No loss of power in limbs, but knee- and ankle-jerks absent. Discharged after 62 days' stay in hospital.

CASE 10.—Boy, æt. 4, admitted December 23rd, 1904, on 4th day of disease. State on admission: Fauces and palate œdematous. Membrane covers both tonsils, pillars, and tip of uvula. Profuse nasal discharge. Membrane visible in nasal fossæ. Moderate adenopathy. Stertor and fœtor. Petechiæ round neck. 24,000 units. Adrenalin chloride m. v., 2 hourly.

5th day. Fauces still œdematous. Fœtor and stertor increased. Thick cloud of albumin in urine lasting till 40th day. 24,000 units.

6th day. Several fresh petechiæ on neck. A few on scapulae. Bruise at second injection site.

7th day. Numerous fresh petechiæ on neck, back, buttocks and legs. Liver 2 fingers' breadth below costal margin. Throat clean.

11th-15th days. Urticaria.

14th day. Palatal palsy.

26th day. Cardiac arrhythmia.

35th day. Ciliary palsy.

42nd day. Labial palsy.

49th-53rd days. Pharyngeal palsy.

54th day. Allowed to sit up, but it was a fortnight before he could walk by himself. The knee- and ankle-jerks were still absent on his discharge from hospital on the 72nd day.

CASE 11.—Boy, æt. 7, admitted March 5th, 1905 on 4th day of disease. State on admission: Fauces extremely œdematous. Thick membrane covers both tonsils and pillars, and is continued as a thin film almost on to hard palate. Adenopathy well-marked. Thick nasal discharge. Membrane visible in nostrils. Much fœtor. 24,000 units. Adrenalin chloride m. x., 2 hourly.

5th day. Delirious in night. Bruise on left calf and back of left hand. 24,000 units. Albuminuria lasting till 31st day.

8th day. Liver 1 finger's breadth below ribs. Throat clean.

11th-12th days. Urticaria.

11th day. Palatal palsy lasting till 60th day.

15th-27th days. Cardiac dilatation and arrhythmia.

28th day. Ciliary palsy.

50th day. Squint, ptosis and diplopia.

Some motor paresis for a fortnight after he was first up in clothes.

Discharged after 78 days' stay in hospital.

CASE 12.—Girl, æt. 7, admitted at 12.15 a.m. on March 14th, 1906, on 5th day of disease. State on admission: Fauces œdematous. Thick membrane covers tonsils, anterior pillars, uvula, and part of soft palate. Watery nasal discharge. Stertor and fœtor. Proconsular neck. Albuminuria persisting till 41st day. Babinski's sign in both feet lasting till 33rd day. 24,000 units. Adrenalin chloride m. x., 4 hourly. 1.20 p.m., 24,000 units.

6th day. Hæmorrhage from beneath membrane on palate.

7th day. Sanious nasal discharge.

8th day. Numerous petechiæ on back and sides of thorax. A few round neck and in left groin. Punctate eruption on knees. Bruise on right iliac crest.

9th day. Hæmorrhage from fauces. Voice nasal.

11th day. Throat free of membrane. Extensive superficial necrosis of epithelium of tonsils, uvula, pillars, and soft palate.

12th day only. A few small wheals on abdomen.

25th day. Ciliary palsy.

33rd-49th days. Cardiac dilatation and irregularity.

40th-60th days. Labial palsy.

Transferred to convalescent hospital on 70th day of disease. No loss of power in limbs, but knee- and ankle-jerks absent.

CASE 13.—Boy, æt. 5, admitted April 1st, 1908, at 12.15 a.m. on 5th day of disease. State on admission: Fauces and palate œdematous. Membrane covers tonsils, pillars, uvula, and soft palate. Profuse nasal discharge. Proconsular neck. 28,000 units. Adrenalin m. x., 4 hourly.

11.15 a.m. Much epistaxis. 24,000 units. Adrenalin increased to m. x., 2 hourly.

6th day. Bruise over tubercle of left tibia.

7th day. Bruises over right posterior iliac spine. Sanious nasal discharge. Albuminuria persisting till 44th day.

9th day. Throat clean.

12th day. Palatal palsy lasting till 52nd day. Heart sounds indistinct. Liver edge 1 finger's breadth below costal margin.

12th-13th days. A few small wheals on abdomen.

15th day. Urticaria on face and thighs.

21st day. Ciliary palsy lasting till 45th day.

25th-64th days. Cardiac irregularity and dilatation.

32nd day. Labial palsy.

76th day. In clothes. For a few days he was unable to walk without support. The knee- and ankle-jerks which were sluggish on admission were lost by the 32nd day and were still absent on his discharge on the 101st day.

It will be seen that all these cases showed the characteristic features of malignant diphtheria. In addition to severe angina, all but one had some degree of nasal involvement. Albuminuria was present in all. In 9 it was abundant, and lasted for more than three weeks.

All developed extensive paralysis. Palatal palsy occurred in all, in 4 it was precocious, i.e., appeared before the beginning of the third week. All but two who were too young to test, showed ciliary palsy. All manifested some degree of cardiac dilatation and irregularity. In two there was cardiac vomiting. Ten showed considerable weakness of the lower extremities which persisted for a fortnight or more after first getting up. In two of the remainder though there was no actual loss of power, the knee- and ankle-jerks were abolished (paraplegie fruste of Aubertin and Babonneix. (a) Labial palsy was noted in 6, squint

in 4, paralysis of the pharynx in 4, and of the diaphragm in 2.

The length of stay in hospital was considerably longer than the average, though only one patient (Case 3), developed a secondary disease—scarlet fever. The shortest stay was 62 days, the longest 97, and the average period, 80 days.

The treatment in each case consisted in large doses of antitoxin, the justification for which will be seen in Table III., and in the internal administration of adrenalin. This drug was given not so much for the sake of controlling the hæmorrhages, which in no case were sufficient to endanger life, but to compensate for the suprarenal insufficiency, clinical and anatomical evidence of which exists in every severe case of diphtheria.

#### SUMMARY.

1. Cutaneous hæmorrhages occurring during the early stages of the disease with or without hæmorrhages from the mucous membranes and associated with other features of malignancy, occur in about 5 per cent., of all cases of diphtheria.

2. The severity of the diphtherial attack is usually due to neglect of treatment at an early stage, but is sometimes due to precocious malignancy (*cf.* syphilis).

3. Hæmorrhagic diphtheria is confined to children. It is not affected by the season, sex, or previous health.

4. Reaction to antitoxin is delayed, and the usual sequelæ of serum treatment are much less frequent in hæmorrhagic than in milder forms of diphtheria.

5. The mortality of hæmorrhagic diphtheria is over 80 per cent.

6. All the cases which recover suffer from extensive paralysis.

7. Treatment should consist in large doses of antitoxin associated with frequent administration of adrenalin.

## QUACKS, FALSE REMEDIES, AND THE PUBLIC HEALTH.

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### PART III. KIDNEY CURES.

THE heartlessness of the nostrum vendor is nowhere more apparent than when he promises to cure chronic kidney disease. Needless to say, chronic Bright's disease is accompanied with changes in the delicate structure of the kidney that are past cure. It is here that, under skilled medical supervision, the life of a patient thus affected may be prolonged for many years in comfort. In the case of the secret remedy, however, there is no skilled supervision; the whole transaction affords an apt illustration of the blind leading the blind. The medically unskilled invalid diagnoses his own kidney disease, and buys the secret remedies of the medically unskilled nostrum vendor. As often as not he gets jalap or some other remedy which, although it will not materially shorten his days, yet cannot possibly better his kidney disease, assuming the latter to exist. The only ray of comfort to be gleaned comes from the reflection that many of the persons who buy these remedies are not really suffering from any kidney disease.

Years ago it came to the author's knowledge that a prominent member of Parliament, a titled man, since dead, was a shareholder in one of the most notorious of the kidney cure companies then and still in existence.

A much advertised internal remedy for baldness has been found to contain hæmoglobin, "the dead colouring matter of the blood of warm-blooded animals." There is not any scientific evidence to show that either hæmoglobin or any other drug can exert a specific action in promoting the growth of the hair when taken internally.

EXISTING METHODS OF CONTROL, DIRECT AND INDIRECT, OVER QUACKS AND QUACKERY.

It may be said at once that there is no effectual control over the evil of irregular medical practice.

The Charter of Henry VIII. empowering and directing the Royal College of Physicians of London to deal summarily with false practitioners and false "poticaries" in London and seven miles round has not been properly carried out, although again and again ratified in successive Acts up to the Medical Act of 1858, which created the General Medical Council. Their penal powers, however, were exercised intermittently for centuries and in the year 1857 we find the College asserting its right in "Churchill's Medical Directory" to commit offenders to Newgate. Section 40 of the Medical Act, 1858, made it a penal offence for any unqualified person to assume a medical title or any title implying him to be registered under the Act. In practice, owing to the interpretation of this section by judges and police magistrates, the Act is easily evaded by any charlatan. The only other method of prosecuting false practitioners is under the Apothecaries' Act, whereby that body is empowered to prosecute unqualified persons practising medicine, but only when they sell their medicines as well as advice. This provision, again, is easily evaded by the quack, who need only sell his advice and throw his physic into the bargain. Feeble as this means of control of irregular medical practice may be, it is the only one that has been available for generations past, in the absence of or the extremely infrequent action on the part of the police. That state of matters is hardly creditable to a legislature that recognised the evil and created ample and drastic powers to deal with it some four hundred years ago. The foregoing and some other existing methods of dealing with false practice and false remedies—for the two things are, in the author's opinion, inseparable—will next be considered somewhat in detail.

#### POLICE ADMINISTRATION.

The powers of the police over fraudulent quacks and secret medicine vendors are great. They have only to follow up advertisements of a suspicious nature to discover the real nature of the methods pursued in any given case. Naturally, the police are loth to prosecute under the penal section of the Medical Act, inasmuch as the difficulty of obtaining convictions under that Act is notorious. It is open to the police authorities, however, to prosecute for the offence of obtaining money under false pretences. From our short analysis of the nature of secret remedies of the baser type, it will be readily seen that the exposure of their worthlessness would be in most cases an easy matter. No doubt such prosecutions, from the need of expert evidence and of good counsel, would be costly, but that is true of all criminal prosecutions undertaken in the interests of society. Something may be done locally by bringing pressure to bear upon Watch Committees and County Councils, or in London, where the police outside the City proper are not under popular control, upon the Home Office. It is to the latter central administration that the public should naturally look for protection against fraud, were there only a properly organised system of public prosecution in existence. It is a well-recognised fact that notorious frauds may be carried on for many years, after repeated exposures in the newspapers, without any attempt at interference on the part of the authorities. The unhappy man who has once been convicted of the most trivial offence is an object of police suspicion, and sometimes of police supervision, for the rest of his days, whereas an unconvicted rogue may practice notorious frauds and live a life of undisturbed luxury. Surely the prevention of fraud is a higher police function than the surveillance, say, of an unhappy wretch who has presumably purged his offence by undergoing a term of imprisonment.

Of late, however, the police have instituted prosecutions in the case of several notorious quacks, and happily with invariable success.

Dr. A. G. Bateman has reminded the writer that in this respect the Chief Constable of Brighton deserves the highest praise for his successful crusade against the quack practitioners within his district. For instance, a year ago he secured the conviction of a notorious offender, who for many years had been living in Brighton in great style, and was known for the well-appointed equipage which he drove on the



Parade daily. This man, by means of specious advertisements of a semi-religious type, and a stock of carbonate of soda and bromide of potassium, and sold as a cure-all under a grandiloquent name, made an income which would have almost fallen under the lines of the super-tax. The Chief Constable, securing ample evidence, proceeded against this well-known townsman, and, after committal to Lewes Assizes, a conviction was obtained, and imprisonment followed for false pretences. Brighton can no longer be a safe and pleasant residence for quack doctors, and if Chief Constables of other cities and towns would only follow the excellent work done by their Sussex colleague, the public would be saved many thousands of pounds a year.

The attention of the Home Office and of the police can hardly fail to have been drawn to the scathing condemnation of Bile Beans already quoted. Four Judges—namely, Lord Low, Lord Kyllachy, Lord Stormouth Darling, and Lord Justice Clerk—who delivered judgment, concurred in the application to the Bile Beans business of such terms as "gigantic and too successful fraud," "deliberate inventions," "lying tale," "a deliberate fraud upon the public," "fraudulent misrepresentation," "business based upon unblushing falsehood." With such evidence one would imagine that the police and the Home Office would not hesitate to take action against newspapers inserting advertisements of a business thus characterised in a British Court of Justice. Yet these advertisements have since been published systematically in the public newspapers. Surely any Home Secretary who found himself unable to deal effectually with an evil spoken of by four Judges of the High Court in terms of scathing condemnation, should at once apply to Parliament to place in his hands the necessary powers.

#### THE PENAL POWERS OF THE ROYAL COLLEGE OF PHYSICIANS OF LONDON.

The Royal College of Physicians of London came into existence under a Charter granted by King Henry VIII. (a) Amongst the various reasons given for incorporating the College was the following (b):—"After the example of other nations, the King has determined to found a College of the learned men who practise physic in London, and within seven miles, in the hope that the ignorant and rash practicers may be restrained or punished." From this it is evident that the keynote to the whole Charter was the desire to suppress irregular medical practice.

Under the Charter the College of Physicians was empowered to examine candidates and to grant a licence to practice medicine. No one was permitted to "exercise the faculty" without the College licence under a penalty of £5 per month, half of which was to go to the Crown and half to the College. Under this Charter the president and elects of the College had summary powers to imprison false practitioners and to visit "poticaries," inspect their drugs, and punish those who had bad drugs, as well as to destroy their wares.

The penal powers given in 1518 have never been repealed. Great as was the power against irregular medical practice and remedies, it was increased under Mary, who confirmed the previous Charter in every particular. (c) In Section 4 it directs that whensoever the President or Commonalty of the Faculty of Physic of London "shall send or commit any such offender, for his or their offence or disobedience, contrary to any article or clause contained in said grant or Act to any ward, gaol, or prison within the same city and precinct, the gaolers, etc., shall receive them until the President discharge them."

This section conferred specifically on the College of Physicians the power to imprison quacks and false drug vendors on their own summary authority, and apparently to detain them as long as they might think fit, or at any rate until the fines were paid. Under it imprisonment and fines were repeatedly inflicted by the President of the College. There can be no

doubt as to the precise meaning of the Act of Mary, for in Section 5 it says:—"And further be it enacted by the authority aforesaid, for the better execution of the search and view of the 'poticary wares, drugs, and composition, according to the tenour of a statute made in the 32nd year of the said King Henry VIII.;" the section then goes on to empower the President to act in failure of wardens of gaols and others.

The power was confirmed in 15 James, Oct. 15th, although this particular charter was not presented to Parliament for approval, and again in 54 George III., cap. 118, which extends disciplinary powers over qualified men throughout England, and all powers to Westminster.

The Charter of Henry VIII. was finally confirmed in the Medical Act of 1858, thus bringing the penal powers in unbroken succession from 1518 to the present day. The new Act gave power to the Royal College of Physicians of London of applying for a new Charter under the title of Royal College of Physicians of England, but the College has not availed itself of the permission. Section 47, on condition of surrendering all Charters except that of Henry VIII., and confirming all rights, powers and privileges of Henry VIII., c. 5, as far as such chapter and Act are inconsistent with the new Charter.

In 1860 a short Act to amend the Medical Act of 1858 was passed (23 and 24 Vict., cap. 66). It dealt with the College of Physicians of London, and repealed letters testimonials (qualifying powers), but expressly (Section III.) confirmed "all existing rights, powers, authorities . . . duties and privileges."

From the foregoing account it would seem that the powers of the Royal College of Physicians with regard to quacks and quackery in London and within a compass of seven miles have been confirmed by all subsequent legislation. The matter is of great importance when we regard the failure of the General Medical Council, created by the Medical Act of 1858, to exercise control over any form of unqualified medical practice.

Assuming, for argument's sake, that the General Medical Council absorbed the ancient (if neglected) duties of the Royal College of Physicians of London to control quackery in and around the metropolis, let us inquire why their penal function in that respect has proved a failure. The Penal Section of the Act runs (§40):—

"Any person who shall wilfully and falsely pretend to be or take or use the name or title of a physician, doctor of medicine, licentiate in medicine or surgery, bachelor of medicine, surgeon, general practitioner, or apothecary, or any name, style, title or addition or description implying that he is recognised by law as a physician or surgeon, licentiate in medicine and surgery, or a practitioner in medicine, or an apothecary, shall on summary conviction for any such offence pay a sum not exceeding £20."

To the non-legal mind the section appears to afford ample safeguard against the quacks, but in practice the proverbial coach and four has been driven repeatedly through Section 40. This fact has been well stated by Dr. A. G. Bateman, the Secretary of the Medical Defence Union, who has had an unrivalled experience in the working of the Medical Acts. He quotes the opinion of a learned counsel that, in order to secure the conviction of an unqualified person, the following points must be considered:—

"It is not enough for the prosecution to prove that the accused is not registered.

"It is not enough to prove further that he calls himself by a registrable title or some title that is rather like a registrable title, or seems to imply medical skill and knowledge.

"It is not enough to prove still further that he has no right to the title at all.

"You must go further still and prove that he has no reasonable grounds at all for thinking that he had the right to use the title, so as to leave no other alternative but the inference of a deliberate attempt to impose upon the public.

(a) September 23rd, 1518, 10 Henry VIII.

(b) See Charter in the Official Book of the Royal College of Physicians of London, 1897.

(c) Mary, Sess. 2, Cap. 9, Royal College of Physicians of London.

(a) "Unqualified Medical Practice," A.G. Bateman, M.B., "National Health," August, 1908, p. 175.

"In other words, you have to prove actual fraud and a personal knowledge of that fraud by the offender." (a)

It is clear that, under such conditions, the Medical Act could have few terrors for the unqualified charlatan—and indeed such has been the case. An interesting illustration of the futility of Section 40 is given by Dr. Bateman. It deals with one Bridgwater, calling himself M.D., U.S.A., although no such medical degree was in existence, who carried on an extensive medical practice in Cardiff. He was proceeded against by the Medical Defence Union before the stipendiary under the 40th Section of the Medical Act, but the summons was dismissed on the ground that there was no "implying" that the respondent was registered. An application was then made to the High Court for a *mandamus* to compel the magistrate to state a case, but this was also refused, and one of the Judges of the Divisional Court remarked that "on the cases stated there is a complete fog. It is impossible to say whether this is a question of law or fact."

Bridgwater, so this interesting narrative proceeds, continued to practise, but came to the larger field of London, where, under the guise of the Progressive Medical Alliance, he carried on frauds of various kinds, until, in 1906, he was convicted at the Old Bailey for forgery, and was sentenced to penal servitude. In the opinion of the police who gave evidence, his criminal career was enabled to be carried on with impunity for many years, in consequence of the "cover" of his so-called medical practice.

Comparing the Medical Act with analogous Acts framed to protect the public against unqualified practice in dentistry and veterinary surgery, we find an amazing difference. A conviction has been obtained against an unqualified dentist for merely putting up a statement that teeth were skilfully extracted, on the ground that the statement implied qualification. A man at Kingston-on-Thames who advertised himself as a "canine specialist," was convicted for implying that he was specially qualified to practice a branch of veterinary surgery. Had a hundredth part of this rigorous interpretation been exercised by police court magistrates upon Section 40 of the Medical Act, the public would long ago have been as well protected against quacks and injurious secret remedies—which are in essence a mere offshoot of unqualified practice—just as effectually as they are with regard to their teeth and to the health of their dogs, cats and horses.

But what have the General Medical Council been doing for the fifty years it has been in existence? Have they ever tried to protect the public from the evils of quackery? Have they ever attempted to secure revision of the Act by the Legislature in order to make good the defects revealed in its application? The answer is, that the General Medical Council have failed in their duty towards the nation no less flagrantly than the Royal College of Physicians of London failed with regard to the metropolis. It is only in 1909 that the Council has, acting upon a sub-committee report, presented to the Government the following resolution:—"That the General Medical Council, being of opinion that the present Medical Acts do not sufficiently enable persons requiring medical aid to distinguish qualified from unqualified practitioners, and that it is contrary to the interests of the public that medical and surgical practice should be carried on with impunity by persons holding no recognised qualifications, request the Government to take steps for the appointment of a Royal Commission to inquire into the evil effects produced by the unrestricted practice of medicine and surgery by unqualified persons."

It is due to the efforts of the Direct Representatives of the medical profession upon the General Medical Council that the matter was brought to the front. On the original motion of Dr. Langley Browne, seconded by Dr. L. S. McManus a Committee was appointed to investigate the laws as to unqualified medical practice existing in the colonies and dependencies and in foreign countries. When the report of the committee was received the General Medical Council decided to ask the Privy Council to inquire into the

subject in the United Kingdom by commission in the terms of the above resolution.

In answer to this request the Government issued a Memorandum in 1909 to Medical Officers of Health asking them to furnish reports of any evils they may have met with in connection with unqualified practice. In view of the nature of the occupation of sanitary officers it seems likely that much more direct information could have been obtained from hospital surgeons, general practitioners, police surgeons and coroners. However, it may be presumed the General Medical Council were not consulted on the point. That august body may be congratulated on having gone so far as to recommend the appointment of a Royal Commission, which, as already stated, is here regarded as including the lesser question of the sale of secret remedies in the greater term, "unqualified practice."

The indifference hitherto shown by the General Medical Council to the failure of the penal section of the Medical Act of 1858 may be traced to its constitution. Of its 34 members, 5 are Crown nominees, and 24 representatives of the various qualifying Universities, colleges and halls, while 5 only are directly elected representatives of the medical profession. As the various qualifying bodies are for the most part governed by irresponsible Councils or by the higher diplomates, to the exclusion of the rank and file of the college, it follows that the nominees of such bodies on the General Medical Council do not represent the main mass of qualified medical men but rather autocratic corporations and selfish interests. In a General Medical Council thus constituted, it is natural that troublesome questions such as the failure of the Medical Act to suppress quacks and quackery should be neglected. A matter of that kind, vital as it is to the welfare of the public and the protection of the medical profession, could bring nothing but disturbance into the serene atmosphere of college halls and council chambers. It is fairly safe to say that if any strong and wholesome representation of the real medical life of the country—in the shape of the general practitioner—had been permitted in the General Medical Council during the past fifty years, the question of the penal prosecution of quacks would long ago have been settled.

Imagine a great body like the General Medical Council faced with the failure of Section 40 of the Medical Act. There is nothing to show—so far as can be ascertained—that they have ever taken any bold and vigorous steps towards obtaining a strengthening amendment to that Act. Supposing for the moment the oft-ratified duty of the London College of Physicians to have been merged by the Act of 1858 in the powers and duties of the Council, have they ever considered how that solemn duty to the public could best be discharged? Or, if the London College be supposed to retain the duties as to the prosecution of quacks imposed by its original Charter, have the General Medical Council done anything to bring home to the physicians a sense of their responsibility and of their neglect? Or has the representative of the Royal College of Physicians, who has sat on the Council for fifty years, ever raised the pertinent point as to whether the duty of quack prosecution still lay with the College, or had been transferred to the General Council, or had lapsed into no man's land?

The foregoing observations are clearly made from one point of view, and it is possible that both the Council and the Royal College of Physicians may have a satisfactory explanation from their side of the question. An obvious answer of the Council would be that it was no part of their duty to prosecute quacks or to strengthen defective Acts. There would doubtless be some force in such an argument, but at the same time it must be borne in mind that they were called into existence by the Act of 1858, which purports to be framed in order to enable the public to distinguish qualified from unqualified practitioners by means of an official *Register* and by other provisions. Surely it is the bounden duty of a Council created for such a purpose to use its great influence with the Privy Council to take steps to amend that particular Act, which is open to the fatal flaw that it permits the use of medical titles and the practice of medicine by unqualified persons.

To the average layman it would seem a clear enough duty of the General Medical Council long ago to have secured final decisions in the High Courts of doubtful reading of the Act that brought them into existence, and to have striven to their utmost to get the penal clauses strengthened by Parliament.

Similarly, the Royal College of Physicians may say that their duties were superseded in the Act of 1858. That hardly coincides with the small special Act of 1860, which expressly confirms all the duties and privileges granted under the Charter of King Henry VIII. These duties were imposed as some kind of return for the monopoly of granting qualifications to practice medicine granted to the College. The privileges are retained to this day, but the duty of prosecuting false practicers and false 'poticaries has been neglected. The duty can hardly be said to have become obsolete, as some laws such as the ancient Act regulating the observance of the Lord's Day have become obsolete. The duties of the Royal College of Physicians have been confirmed in subsequent Acts up to 1858 and 1860. They were exercised at times over quacks for two centuries or more and were publicly affirmed by the College itself, as already stated, in the Medical Directory for the year 1857. If the Legislature, then, be in need of an instrument, they may conceivably turn to the Royal College of Physicians, and ask that body for an account of their stewardship during the last 390 years.

It is worthy of note that, in the opinion of Dr. Norman Moore, a gentleman well versed in the history of the London College, up to the year 1906, there had been no material alteration in the constitution of the College. In a notice of that body he said that it was provided in 1518, when Henry VIII. was full of his youthful zeal for knowledge, and "has continued without any material alteration to the present day." (a)

Parliament, however, in search for a method of revivifying the General Medical College and the qualifying bodies of the United Kingdom, could effect that purpose by a stroke of the pen. The constitution of the Council is for the most part that of the non-representative nominees of the constituent corporation. There is nothing in the Act to show how those representatives were to be chosen. Parliament or the Privy Council has simply to decide that in future the representative of every qualifying body upon the Council shall be elected by their respective graduates or diplomates.

As regards the Royal Colleges of Physicians and Surgeons of England, Scotland, and Ireland, the government is in the hands of the Councils and Fellows, to the exclusion of the lower ranks of diplomates, namely, the licentiates, and in some instances the members. As the Colleges draw the bulk of their revenue from the lower ranks, it follows that the exclusion of the latter from any part in the government of the colleges runs counter to the modern democratic view that those who contribute income should have a voice in its expenditure.

Far as the cry may seem, it is not unlikely that the autocratic and largely irresponsible government of the Colleges has a direct relation to the prevalence of quackery. Had the qualifying corporations been governed by the rank and file of the medical profession, and had the majority of the Council been representative of medical practitioners generally, instead of the corporations, they would long ago have contrived to deal with the blatant evils arising to the public from the practice of quackery. Surely the legislative wisdom of the nation can cope with an evil which was emphatically denounced and legislated against 400 years ago.

With the question of the government of the Colleges that of a single portal qualification is closely connected. The public, when once fully informed of the grotesque nature of the present position with regard to medical qualification, will be likely to cut the Gordian knot in a simple and direct fashion. For instance, the English Colleges are at present amalgamated to give a conjoint qualification, M.R.C.S. England, L.R.C.P. London. Why should they not be united into a single body, giving a single qualifica-

(b) *Brit. Med. Journ.*, June 1st, 1906.

tion? Why should not the Scotch Colleges—three in number—be united in a similar manner? Why, indeed, should not the English, Scotch, and Irish Colleges and Halls—that is to say, nine qualifying bodies—be amalgamated with a single qualification? There need be no disconcerting disturbance of teaching methods and ancient traditions. The interests of the public and of the medical profession would be advanced in various ways by the institution of a single professional qualification, a plan that answers well enough in the sister profession of the law.

(To be continued.)

## THE TREATMENT OF CASES OF MUSHROOM POISONING

By PROF. J. MAHEU, M.D.,  
Of the Faculty of Medicine of Paris.

[SPECIALLY REPORTED FOR THIS JOURNAL.]

POISONING by mushrooms is, as a rule, an accident that calls for immediate treatment, and as this varies to some extent according to the nature of the intoxication, our first duty must be to ascertain what kind of mushroom has been eaten, and this, fortunately, is not usually a matter of any difficulty.

In every instance the first thing to be done is to get rid of the toxic material by the aid of emetics and purgatives. As an emetic nothing is better than ipecacuanha; tartar emetic should on no account be employed, more particularly in cases of poisoning by any of the bulbous agarics, which give rise to stupor, algidity, and extreme prostration. In order to obtain a quicker action, a little emetine may be added to the powdered ipecacuanha:—

Pulv. ipecac., 25 gr.

Emetine,  $\frac{1}{2}$  gr.

To be stirred up with a pint of tepid water, a tumblerful to be swallowed at short intervals.

Should we fail in our attempts to induce emesis, and in cases at an advanced stage, we must avail ourselves of the stomach tube, an instrument without which no medical equipment can be considered complete, especially in the country. We must wash out the stomach, and when we have done that we may introduce stimulants—coffee, spirits of ammonia, ether, brandy, etc.—in order to combat the symptoms of excitement or depression, whichever may be present.

In presence of contraction of the jaw muscles, and in dealing with fractious children, we may prefer to employ a hypodermic injection of apomorphine:—

Aquæ dest., 16 min.

Apomorphine hydrochlor.,  $\frac{1}{4}$  gr.

For children a tenth of a grain or less will be sufficient.

Fortunately, the earliest effect of poisoning by mushrooms, especially those possessed of acrid and irritating properties, is to induce salutary vomiting and profuse diarrhoea. Our duty in this case is to assist Nature, and, independently of pharmaceutical agents, to promote free vomiting by administering tepid strongly-salt water, olive oil, or sulphate of copper, which can usually be obtained everywhere, and can be employed in small doses:—

Cupri sulphatis, 2 gr.

Sacchari pulv., 1 dr.

Stir up in 1 or 2 spoonfuls of water, and repeat twice or three times.

Having emptied the stomach, give milk, mucilages, linseed tea, or white of egg beaten up with water, or we may follow Boudier's advice and give a weak solution of iodide of potassium, which is the antidote for the agarics:—

Potassii iodidi, 15 gr.

Tinct. iodi, 10 gtt.

Aquæ dest., 4 fl. oz.

In tablespoonful doses.

Although purgatives cannot act as effectually as emetics, it is well to give them, with a preference for emeto-cathartics in slight cases:—

Emetine,  $\frac{1}{2}$  gr.

Sodii vel magnesii sulph., 5 dr.

In two tumblers of water. To be given after the

emetics to clear out the mushroom residues that may have passed into the intestine.

Of course, any purgative may be made use of under such circumstances—sulphate of soda, castor oil, sulphate of magnesia, etc. Avoid drastic purgatives such as senna and jalap, which would only aggravate the gastro-intestinal irritation.

No reliance can be placed on enemata for the purpose of emptying the bowel, but they may be useful in hastening the effect of purgative medicines. Later they may be useful in allaying pain and inflammation, in the form of opiated enemata, while if there be coma or stupor we may inject hot black coffee, wine or brandy, duly diluted.

Then the abdomen may be rubbed with sedative embrocations:—

Lin. camph., 2 fl. oz.  
Tinct. belladonnæ, 5 dr.  
Liq. opii sed., 1 dr.  
Chloroformi, 2 dr.

In cases of poisoning by agarics containing muscarine (false orange, the panther agaric, etc.), the symptoms are more sudden and violent, but the lines of treatment are the same, except that we must make more use of remedies having for object to subdue cerebral excitement and delirium. Ether appears to be as good as anything, and it is usually at hand, and with it may be associated laudanum, bromide of potassium, and chloral by the mouth or in enemata.

The various symptoms presented by the patient may be combated as follows:—

*Somnolence, Coma.*—Mustard plasters, counter-irritants, dry friction, or rubbing with alcohol or brandy; baths.

*Delirium and Convulsions.*—Tablespoonful doses of the following mixture, repeated half-hourly:—

Tinct. moschi, 15 min.  
Potassii, 50 gr.  
Syrup etheris, 1 āā 10 dr.  
Aque menth. pip., 1

In presence of violent convulsions give:—

Chloral hydratis, 1 dr.  
Syrup aurantii flor, 4 dr.  
Aque, 3 fl. oz.

A fourth part of this mixture to be given at intervals of a quarter of an hour. Chloral may also be given in enemata.

*Vomiting.*—Ice and iced drinks, effervescing mixture.

*Abdominal Pain.*—Fifteen or 20 drops of liquid extract of opium in sweetened water, to be given in three doses at 20 minutes interval; or we may give 20 or 30 drops in an enema or a hypodermic injection of a fifth of a grain of hydrochloride of morphine. Avoid alcoholic vehicles which may dissolve the alkaloids or toxins, and do not allow the morphia injections to be given by others. Nevertheless, after the emetics and purgatives have done their work, we may prescribe the following mixture:—

Spt. etheris co., 30 min.  
Tinct. cannellæ, 2½ dr.  
Ammoniac acetatis, 1½ dr.  
Spt. vini gallici, 1½ fl. oz.  
Syrup etheris, 1 fl. oz.  
Aque menth. pip., 2 fl. oz.

To be given in tablespoonful doses every half-hour.

It is, however, especially in presence of phallogid symptoms—that is to say, poisoning by members of the group of bulbous agarics (*Ammanita phalloides*, *A. citrina*, *A. virosa*, etc.)—to which nine-tenths of the fatal cases are due, that prompt and vigorous treatment is indispensable. In contrast with the effects of the groups previously mentioned, the symptoms of poisoning are manifested but slowly—half a day or even a day after the ingestion of the mushroom. At that stage we are confronted by grave symptoms—stupor, cardiac depression, adynamia, etc. It behoves us to employ forthwith mustard poultices, powerful counter-irritants, active friction of the skin, and hot baths whenever possible. Subcutaneous injections of ether, or even strychnine, in fiftieth-of-a grain doses, may prove useful; coffee, tea, and acetate of ammonia will also be of service.

Hypodermic injections of caffeine at the rate of 8 grains in the day is good treatment, especially in

presence of cardiac depression. It may also be given in mixture form, combined with ether, and this may be administered by anybody, whereas the hypodermic injections of strychnine should be reserved for the physician himself. The same remark applies to atropine, which is an antidote of muscarine, pilocarpine, and digitalis which may come in handy to combat the sequelæ. In some instances we may have to employ injections of normal saline solution to “wash” the blood.

In certain cases of acute delirium, provoked by the false orange, a few leeches to the pit of the stomach or in the mastoid region may assist in subduing the congestive phenomena. Prolonged hot baths are particularly useful in presence of stupor.

To sum up, when we are called to a case of mushroom poisoning, we begin by giving an emetic, followed by a purgative, along with plenty of warm drinks—milk, albuminous water, etc. We must then turn our attention to the ataxo-adyneamic symptoms, delirium, etc., by giving sedatives—ether or chloral, for example, or combat the purely adynamic symptoms, hyposthenia, by ether, coffee, or caffeine, mustard poultices, frictions and so on.

There is an empirical antidote for mushroom poisoning which has of late found favour at the hands of physicians, especially by Dr. Secheyron—viz., powdered charcoal; this is always at hand, and in large doses it neutralises the action of the poisons. Many cases of the kind in the Cevennes seem to show that it is efficacious. We should, however, always begin with an emetic, but the charcoal can be given directly after without neglecting the other urgent measures.

## OPERATING THEATRES.

### ST. THOMAS'S HOSPITAL.

**PERITONITIS CAUSED BY RUPTURE OF AN EMPYÆMA OF THE APPENDIX VERMIFORMIS.**—MR. BATTLE operated on a boy, æt. 9, under the care of Dr. Acland, who had been admitted a few hours previously with acute abdominal symptoms. The patient was stated to have been quite well until 1 o'clock in the morning of admission, when he was awakened by severe pain in the abdomen, and vomited. He was taken to the hospital six hours later, when he was still suffering severely from the pain. His pulse was rapid, and respiration thoracic, and he seemed in much distress from abdominal pain. His abdomen was rigid and very tender, and there was some slight dullness in the right iliac fossa. A few months before this it was stated that he had had an attack of abdominal pain which was not of many hours' duration, but was sufficiently severe to make him stay in bed. When seen by Mr. Battle ten hours after the commencement of the attack, the boy was evidently very ill. His aspect was one of distress, his expression being anxious, his face pinched, and his mouth dry; his pulse was 140, respirations entirely thoracic; the abdomen did not move on respiration; it was tender all over, especially in the right flank, and there was dullness on light percussion over the right flank, iliac fossa, and extending over the pubes. Examination per rectum did not give any information. Mr. Battle expressed the opinion that the patient was suffering from commencing peritonitis, due to disease of the appendix, and he thought the most likely cause for such a very acute condition was a rupture of an empyæma of the appendix. Of the acute conditions starting in the region of the appendix of this formidable type, there were only two which could produce such an amount of fluid in the peritoneum within such a short time, and these were empyæma of the appendix, which had burst into the peritoneal cavity, or the rupture of an appendix abscess into the general cavity of the peritoneum. In the latter instance there would have been a history of some days' illness before the sudden attack, and in this instance the boy was quite well on the previous day, and played about as usual. Operation was performed at once. Pus escaped when the peritoneum was opened, and a considerable quantity of thick pus was found in the pelvis. The appendix was lying

along the brim of the pelvis, was about 4 in. in length, and presented perforation about the junction of the distal third and the remainder, from which purulent fluid was still escaping. The appendix was removed, the peritoneum cleaned by means of swabs and strips of gauze, a rubber drainage tube inserted, and wound closed. When the patient had been returned to bed, he was placed in the Fowler position, and continuous instillation of warm saline in the rectum commenced. A calomel purge was to be given so soon as he had recovered from the anæsthetic. When section was made of the appendix, it was found that the lumen was completely closed by a firm fibrous stricture to the proximal side of the perforation, and it was not possible to pass a probe through it.

Mr. Battle remarked that it was not often that an acute case of appendix trouble terminated so quickly in perforation. He had many times seen an empyæma of the appendix on the point of rupture after several hours of pain, and in those instances the peritoneum contained little fluid, and that not purulent; neither was there any lymph formation on the intestines around the appendix, as there was in the case he had just operated on. The shock in this case was also an indication of the severity of the invasion of a healthy peritoneum. He also considered that this case was another proof of the extensive disease of the appendix which may be found even where the symptoms have been very slight. The incision through the abdominal wall was carried through the middle of the rectus muscle, the fibres of which were separated, this incision being the one which gives a direct access to the iliac fossa, and is less likely to be followed by a hernia in later life than one through the linea semilunaris.

## TRANSACTIONS OF SOCIETIES.

### ROYAL SOCIETY OF MEDICINE.

#### CLINICAL SECTION.

MEETING HELD FRIDAY, OCTOBER 8TH.

The President, A. PEARCE GOULD, ESQ., M.S.,  
in the Chair.

DRS. FINZI and ERNEST SHAW read a further report, and exhibited sections of a case of carcinoma mammae treated by radium, previously exhibited.

Dr. H. WANSEY BAYLEY gave a demonstration of the treponema pallidum in syphilitic lesions, of the spirochæta dentium in carious dentine, and of the spirochæta refringens in balanitis. The demonstration was illustrated with microscopical preparations, using the ultra-microscope.

Dr. J. L. BUNCH showed a case of  
MYCOSIS FUNGOIDES.

The patient was a man, æt. 50, and had been affected for 12 months. The eruption at first resembled eczema, but later diffuse infiltration and granulomatous tumours appeared. There was also considerable pruritus. He had been under treatment since July 23rd, and had greatly improved. An arsenical preparation had been injected hypodermically, and X-rays were used locally.

Dr. DE HAVILLAND HALL had seen a case in which the pharynx and larynx had been affected. No parasitic organism had been discovered.

Dr. H. D. ROLLESTON showed a case illustrating PIGMENTATION OF THE MOUTH IN PERNICIOUS ANÆMIA.

The patient was a man, æt. 25, admitted to hospital for diarrhoea, anæmia, and enlargement of the liver and spleen, in July, 1909. There were patches of inky pigmentation on the mucosa of the lower lip and cheeks, associated with marked freckling of the lower part of the face and round the mouth. No arsenic had been taken previously. The number of red blood corpuscles had varied from 1,515,000 to 3,015,000, the percentage of hæmoglobin from 40.76, the colour-index from 1.17 to 1.5, the leucocytes from 2,960 to 4,000. Only one nucleated red corpuscle had been seen.

Dr. F. W. PARKES WEBER suggested that the

condition might be an incomplete form of Xeroderma Pigmentosa.

Mr. ALBERT CARLESS showed a case of a man illustrating

#### EXCISION OF BOTH MAXILLÆ.

This had been performed first on the left side for a tumour of the superior maxilla growing from the upper part. It was thought to be simple in nature. The operation included removal of a portion of the malar bone, the floor of the orbit, the nasal process of the bone, and ramifications of the growth, which had extended in various directions. Microscopically the growth proved to be an epithelial odontome. The patient did well, but returned five months later for a similar tumour on the right side. The right maxilla was then removed, leaving the orbital plate. For 12 months he had continued well. He had been fitted with a denture by Mr. Alfred Hart, and did not show serious deformity. He could masticate soft food, and complained of little inconvenience.

THE PRESIDENT said he had not had a similarly successful case. He remembered that Mr. Parnell, of Eastbourne, had shown a similar one. Until seeing that one, he had not expected that so little deformity would result.

Mr. JAMES SHERREN showed a case of MECKEL'S DIVERTICULUM CONTAINING CALCULI, PRODUCING SYMPTOMS OF ABDOMINAL COLIC.

The patient, a man, æt. 38, had been operated upon for his third attack of acute abdominal pain. The first attack had been ascribed to gall-stones, the second and third were thought to be appendicular in origin. After the abdomen had been opened in the right iliac region, a sac connected with the ileum and containing calculi was at once detected. It was removed, and was found to be about four inches long, and to be partially closed at its attached end by a valvular opening. It was filled with irregular, brownish, brittle calculi composed of cholesterin, calcium oxalate, and a trace of bile pigment. The patient made an uneventful recovery. Four similar cases were on record, in two of which the stones consisted of cholesterin.

Mr. ALBERT CARLESS said that he had once operated upon a somewhat similar case of a young man suddenly attacked with acute abdominal pain. An incision had been made, as for appendicitis, and an egg-shaped swelling found, connected with the intestine and containing a single mulberry calculus.

Dr. A. E. GARROD said that the appearance of the stone in Mr. Carless's case was in favour of its being a gall-stone. If its colour was due to bilirubin, it could be nothing else. Cholesterin would be compatible with the inflammation of any mucous membrane, and occurred in the urine in cystitis.

Dr. E. I. SPRIGGS showed a case of RHEUMATOID ARTHRITIS WITH ENLARGEMENT OF THE GLANDS AND SPLEEN.

The patient was a male, æt. 16. The condition had begun at the age of 10, and had progressed insidiously until most of the joints had become involved. The vertebral, sterno-clavicular, and temporo-maxillary joints had escaped. Axillary, epitrochlear, supra-clavicular, and inguinal glands were enlarged; and the spleen reached about an inch below the costal margin.

Dr. A. E. GARROD said that he did not consider that there was one disease in children and another in adults. The more generalised reaction in the case of children he thought was merely the usual modification in accordance with age.

Dr. H. D. ROLLESTON said that cases similar to those described by Dr. Still had been previously described in adults by a Continental observer, who had isolated an organism from the glands.

Sir DYCE DUCKWORTH said that he had always regarded the cases described by Dr. Still as manifesting the evidences of a blend of the strumous and rheumatic diatheses.

Dr. O. L. ADDISON showed a case of CHRONIC GLANDERS AFFECTING CHIEFLY THE PALATE AND NASOPHARYNX.

The patient was a carman, æt. 26, whose illness had commenced in August, 1907, with the development of

an abscess in the left forearm. He apparently recovered completely, but in December, 1907, the throat became ulcerated, and the condition had extended until the whole of the soft palate and fauces were destroyed, and the greater part of the mucous membrane of the hard palate. Within the last three months three abscesses had formed in the face and neck, and the hard palate had become perforated. *B. mallei* had been obtained in pure culture from the abscesses, and Straus's reaction was positive.

Dr. G. A. SUTHERLAND showed a case of  
FLEXOR SPASM.

It was that of a girl, æt. 5. Flexion of the fingers into the palm of the left hand had been noticed since June. It persisted during sleep and under an anæsthetic. There was no alteration in the reflexes or electrical reaction.

The PRESIDENT showed a case of

SCHLATTER'S DISEASE OF THE RIGHT TIBIA.

It was that of a girl, æt. 13. Separation of the lingiform process of the upper epiphysis of the bone had occurred, followed by irregular growth of bone in the region of the attachment of the ligamentum patellæ.

Sir DYCE DUCKWORTH read a paper on two cases of  
GOUT.

Case 1 was that of a Mohammedan, and was accompanied by marked tophaceous deposits. The patient had been a cook and addicted to alcohol. Sir Dyce commented upon the rarity of gout in Orientals, and said that it probably never occurred in Mohammedans who kept the rules of their religion. Photographs of the case were exhibited. Patients with much uratic deposit were usually classified as atonic gout, and sometimes enormous deposits occurred without any pain whatever. The condition of the urine may give no evidence of renal fibrosis, but it may contain sugar, and in course of time a diabetic cachexia ensued in some of the patients.

Case 2 was that of a boy, æt. 14, and was also associated with tophaceous deposit. Suppuration had occurred necessitating operation and removal of tophi from the great toe joints of both feet. The only history of gout in the family was that the great-grandfather was a "martyr to gout." The school dietary allowed of only one meat meal a day, and contained no gout-provoking articles.

Dr. G. PHILIP LEE said that he could recall six cases of acute gout in boys of from 9 to 12 years of age, in his practice at Cork.

Sir DYCE DUCKWORTH, in reply, said that gout was very rare in Ireland, and that he was sceptical as to the correctness of the diagnosis in the cases mentioned by the last speaker.

Dr. W. P. HERRINGHAM read a paper based on two cases of

PNEUMONIA, WITH CONSIDERABLE DISPLACEMENT OF THE  
HEART, SIMULATING PLEURAL EFFUSION.

The first case was that of a man, æt. 41, the subject of consolidation of the left lung, in whom, post mortem, the heart was found pushed over so far that the apex was almost in the middle line. In the second case the pneumonia was right-sided, and the signs so much resembled fluid, that a needle was inserted and a little was actually removed. This, as was found later, really came from the lung. A paravertebral triangle of dulness was detected on the opposite side. After death the heart was almost entirely to the left of the middle line. The triangle of dulness might be explained by a marked scoliosis.

Dr. W. EWART asked if, in the first case, the sound lung was hampered in its expansion, so that it could not counterbalance the tendency to enlargement of the pneumonic lung.

Dr. HERRINGHAM, in reply, said that in that case the other lung was quite healthy.

#### Royal College of Physicians of Ireland.

THE annual meeting of the College for the election of officers will be held on St. Luke's Day, October 18th, and will be followed in the evening by the College dinner.

#### CENTRAL MIDWIVES BOARD.

MEETING HELD OCTOBER 7TH, 1909.

The President, Dr. CHAMPNEYS, in the Chair.

A PETITION signed by Dr. S. H. Smith, of York, and other persons interested in the training of midwives in Yorkshire, asking the Board to permit the written Examination to be held at some recognised centre in the county, was further considered, and it was agreed to make Leeds one of the provincial examining centres.

A letter was read from the County Medical Officer for Worcestershire proposing that in cases where a certified midwife sends a notification of still-birth under the Notification of Births Act, the notice required by Rule E. 20 (c) of the Board's Rules should not be insisted upon.

To this the Board replied that it had no power to dispense with any of its rules.

A suggestion from the Clerk of the Hunts County Council that some means should be taken to draw the attention of the public and of uncertified women now practising as midwives that after April 1st, 1910, they will be debarred from so doing, was approved by the Board, who recommended that it should be carried out by the local supervising authority. An inquiry came before the Board from the Secretary of the Miller Hospital, to which are attached extern midwives, as to what course should be adopted on the outbreak of infectious disease in the house of a parturient woman who was attended by a midwife. After much discussion a resolution was passed to the effect that the Board does not see its way to advise in such cases as are not dealt with by their rules and regulations, but that application should be made to the local supervising authority.

Arthur Lionel Hall Smith, M.B., B.C. Cantab., was placed on the list of Supernumerary Examiners to the Board, and approval as Teacher was granted to Septimus Harold Fairrie, M.B., John Murray, M.B., and Edward Bass Reckitt, M.D.

A motion brought forward by Mr. PARKER YOUNG, "That the resolution of the Board of July 23rd, 1908, 'That the Board is not prepared to consider any further applications for admission to the Roll under Section 2 of the Act,' be rescinded," was carried by 7 votes to 2; but the question, which elicited considerable discussion, will come before the Board again for the decision as to what class of midwives are to be admitted and upon what merits.

"That local supervising authorities be not allowed a hearing in penal proceedings before the Board, except by special leave of the Board, which may be given when, in the course of such proceedings, charges are made against an authority, or its officers, to which an answer may be reasonably expected," was carried.

THE SECRETARY reported that £1,737 had been collected from various County and Borough Councils from which fees were due, and that £115 was still outstanding. Referring to those Councils which had delegated their authority, it appeared that in Bristol, where the authority has been delegated to the Watch Committee, the Act is practically administered by the Chief Constable!

MISS PAGET reported on her visit to the Congress of Italian midwives, as the Board's delegate, at Bologna, last month, and the Secretary was instructed to obtain the report of the proceedings of this and all similar Congresses which might occur, and file them in the offices of the Board. A special meeting of the Board will be held on October 28th to discuss the report of the Midwives Act Committee.

#### Royal Institute of Public Health.

A SERIES of lectures have been arranged by the Royal Institute of Public Health with the view to assisting candidates desirous of qualifying for the positions of health visitors and school nurses. The lectures are given on Tuesdays and Fridays at 37 Russell Square, W.C., at 8 p.m.



## CORRESPONDENCE.

### FROM OUR SPECIAL CORRESPONDENTS ABROAD. FRANCE.

Paris, Oct. 10th, 1909.

#### LUMBAR PUNCTURE.

TAPPING of the cephalo-rachidian liquid in the lumbar region is frequently practised to-day to establish the diagnosis of several affections. By this method also, different therapeutic and anæsthetic agents are introduced into the medullary canal. The chief indications of lumbar puncture are, consequently, threefold: anæsthesia, diagnosis, and treatment.

Intra-rachidian injection of anæsthetic agents has been, and is still, says Prof. Tuffier, a point of much discussion.

Many surgeons have rejected it altogether. It seems, however, that this method is capable of rendering service to the surgeon deprived of competent assistance, as frequently occurs in the country, and certain patients with heart disease in whom general anæsthesia is counter-indicated.

Amongst the surgeons who practise this regional anæsthetic, some employ cocaine, while others, the majority, prefer stovaine.

The patient is prepared as for a simple lumbar puncture, and the needle being adjusted to Luer's syringe of two cubic centimetres, 2, 3, 4, or 5 tenths of a centimetre cube of a solution of stovaine at 10 per cent. (the dose varying according to the importance of the operation) are aspired. The syringe containing the solution is separated from the needle and laid on a clean compress, while the needle is used for the puncture between the fourth and fifth vertebræ. About two drachms and a half of the rachidian liquid are drawn and the syringe fixed on the needle with great gentleness so that its position should not be disturbed. If the little manipulation be well done, the pressure of the rachidian liquid will push back the piston, which is immediately arrested in its course by the operator; the liquid mixes with the solution of stovaine, becoming of milky appearance. Gently and progressively the piston is pushed down to the end, when the syringe is withdrawn and the little wound closed with collodion.

Anæsthesia is obtained in about ten minutes after the injection: a sensation of pins and needles is felt in the feet in about three minutes and a certain impotence in the lower limbs which soon becomes complete.

The amount of stovaine to be injected depends on the region to be operated: the minimum dose (2 centigr.) for the perineum; the maximum for the inferior portion of the abdomen, while a medium dose is sufficient for the lower limbs. The anæsthesia lasts half-an-hour or more.

For amputation of the leg or thigh, four-tenths of the syringe are necessary, and for inguinal hernia, appendicitis, enterostomy, five-tenths will be required. Certain precautions are necessary to observe in this method of producing anæsthesia.

The patient should be placed in the lateral decubitus and left for five minutes in this position after the injection, where the operation is to be practised on one or the other side of the body. In weakly persons, the injection should be preceded by an injection of caffeine or strychnine, and particularly in cases of intestinal occlusion or strangulated hernia. After the operation the patient must lie on his back without a pillow.

Rarely is rachi-anæsthesia unsuccessful, but if, after waiting a quarter-of-an-hour, the anæsthesia is incomplete, some error has been made in the introduction of the needle; the stovaine has been injected into the cellular tissues or the muscle. In such a case, the operation must be performed again.

When proper precautions are taken, accidents following this method are rare. They consist in pallor of the face and cold sweats and sometimes vomiting, retention of urine (rather frequent), headache, especially when a sufficient quantity of cephalo-rachidian

liquid has not been previously drawn off, while six cases of sudden death have been reported, all of which were in elderly patients who had received large doses of stovaine.

As means of diagnosis, lumbar puncture finds its indication in numerous affections, to confirm, by examination of the cephalo-rachidian liquid, diagnosis of obscure cases.

The macroscopic aspect of the liquid in its normal condition is absolutely clear as water, in pathological conditions it is cloudy, purulent or hæmorrhagic.

Cloudy or purulent indicates acute meningitis. Hence each time that a patient presents symptoms of acute meningitis lumbar puncture is indicated. When hæmorrhage is perceived in the liquid it may mean blood effused in the subarachnoid space, but it may also originate from the puncture itself, and a distinction is necessary. If the presence of the blood is due to a wound of a vein by the needle, the liquid is red at the beginning and then pales down; if on the contrary the liquid is frankly hæmorrhagic, it is of a brownish or greenish yellow, and not red.

The presence of blood, when confirmed, may be met with in a large number of affections, but it cannot be regarded as an absolute pathognomonic symptom. However, in traumatism of the cranium, it may indicate intra-meningeal hæmorrhage due in many instances to fracture of the skull, and in any case it is a proof that the traumatism is grave.

From a chemical point of view, the cephalo-rachidian liquid is characterised by abundance of chlorides and by traces of albumen. An increase of the latter is, however, an indication of tuberculous meningitis, while the existence of pus denotes acute meningitis. Where ataxy or softening of the brain is suspected, the existence of lymphocytosis will confirm the diagnosis.

Lumbar puncture has been also employed in the treatment of several affections. For the simple purpose of evacuation, the puncture has rendered great services in fracture of the skull by diminishing compression produced by blood effused in the folds of the arachnoid: the coma disappears, consciousness returns, and the headache is relieved by extracting five drachms of the liquid.

Puncture followed by injection of therapeutic agents has been employed with best success in the treatment of cerebro-spinal meningitis. The serum injected may be that of Roux, Flexner, or Wassermann, and the quantity to be used for a child is one ounce, repeated every day for four or five days; two ounces for an adult. About five drachms of the rachidian liquid should be withdrawn before each operation. Other agents have been introduced into the medullary canal such as anti-tetanic serum, collargol, etc., but without great success.

### GERMANY.

Berlin, Oct. 10th, 1909.

#### THE SURGICAL TREATMENT OF BENIGN DISEASES OF THE STOMACH, WITH SPECIAL REFERENCE TO ULCER OF THE STOMACH AND ITS SEQUELÆ.

A PAPER on this subject appears in the *Arch. f. kl. Chir.*, 1/90, by Dr. Max Busch. The writer states that for stenosis from ulcer, as well as for ulcer that in spite of appropriate treatment steadily persists, the treatment by preference is posterior retrotocolic gastro-enterostomy with a double row of sutures. With an ectatic stomach, especially flaccid, he advises Braun's enteroanastomosis as a prophylactic. With an open ulcer he recommends an after treatment that will reduce the acid condition, washing out if necessary, and a careful selection as regards diet. Resection comes into consideration as soon as malignancy is suspected, also in bad callous ulcers, and especially so when the neighbouring organs (liver and pancreas) are encroached upon. The resection should then always be the circular one proposed by Riedel. A good deal here depends on the individual condition as to whether the more radical and formidable operation of resection should be chosen, or the less dangerous gastroenterostomy. The nervous gastric diseases should not be operated on. There are cases,

however, in which one cannot be certain that no ulcer is present without a preliminary laparotomy.

Prof. Neumann has a communication on **PLASTIQUE OF THE OMENTUM IN PERFORATED ULCER OF THE STOMACH AND DUODENUM**, in the *Zeitschr. f. Chir.* 100. He says the indications for plastique of the omentum are practically four in number:—

1. Line sutures for protection and support, as experience has shown that they afford security.
2. For the hollow organs of the abdomen, especially making good defects in the walls of the stomach and intestines, where the defect cannot be remedied by direct suture.
3. For clothing defects in the serous coat, for the prevention of pathological adhesions between abdominal organs.
4. For making new vascular tracts in certain directions (Talma's operation) and for covering the decorticated kidney.

Although the value of the procedure has not yet been proved as regards Nos. 3 and 4, it has on many occasions been of great service in the first and second sections. In operations for ulcers of the stomach good results have been obtained that would have been impossible without it. Nothing else could have replaced it.

One reason why less success has been obtained with it than might have been expected is that the best use has not been made of it. The writer has lately been making use of the method in a way that not only affords the greatest security to the wound, but also furnishes a channel for feeding the patient during the first few critical days after the operation. Ulcers, he says, with not too large perforation openings, in tissues that are not so rigid that closure by suture seems impossible, are simply sutured and the closure rendered secure by stitching the omentum over it. When simple suture is forbidden on account of the rigidity of the adjoining stomach wall, it is advisable to cut away the very rigid part so that the suture can be made through normally healthy tissue, or to make good the defect by transplanting omentum over it. Success will only be attained in this way, however, when the ulcer is not too near the pylorus, and no narrowing of the pylorus has taken place, or is likely to take place from the operation. In such a case in the condition, if the patient allows it, there are three methods for adoption:—1. The opening may be sutured in any way, and gastrotomy performed at the same time. 2. The ulcer may be excised through healthy tissues, and the opening closed after the method of Heinecke-Mikulicz. 3. A transverse section of the pylorus may be made after the method of Billroth I., Kocher, or Billroth II. He considers operation No. 1 as that of choice for such a case, as by it not only are the immediate dangers removed, but the way is paved for affording the best chances for definite recovery from the ulcer. As a rule, however, patients are mostly brought in in a condition in which operation No. 1 is out of the question, let alone Nos. 2 and 3. In these difficulties there are four ways out:—1. Simply to pack the region with gauze. 2. The ulcer can be treated without considering permeability of the pylorus, and nourishment provided for by a fistulous opening in the small intestine. Success has luckily been obtained in both ways, but they can scarcely be recommended when there is suspicion of stenosis of the pylorus. 3. The ulcer can be sutured into the abdominal wall, when the opening can be made use of later for nutrient purposes; or, 4, when this is out of the question, from immobility of the pylorus, a drainage tube may be inserted through the pylorus into the duodenum, the other end passing out through the abdominal opening.

By the latter process the tube is fixed in the opening in a water-tight manner, it passes outwardly in the same safe manner when wrapped round with omentum.

The writer relates how he proceeded in two cases. He makes the suggestion that his omentum plastique should be tried in cases in which the patients are too weak for the severe operations, where the ulcer of the stomach is surrounded by callous edges, or the ulcer

of the duodenum lies too near the pylorus. In this way the dangers of acute perforation are done away with.

## AUSTRIA.

Vienna, Oct. 10th, 1909.

### LUMBAR ANÆSTHESIA.

GROS, at the Prague Verein, gave a history of the method and *technique* of local anæsthesia, which he has practiced in the gynæcological wards during the last year. The total number was 615 operations under this form of anæsthesia; the liquid he kept stored in bottles, according to Höchst, as a 5 per cent. solution of "Novokain-Suprarenan." Half-an-hour before the injection a subcutaneous injection of 0.01 gramme of morphium muriatum and 0.0003 gramme of scopolimin hydrobrom, was used to dull the pain of the deeper injection.

Out of the 615 cases operated on 538 were completely anæsthetised, that is, 87.5 per cent., while 22, or 3.5 per cent., were imperfectly anæsthetised or suffered from pain which caused the suspension of the injection, and therefore he had to resort to inhalation narcosis, but 55, or 9 per cent., were quite refractory. Of these cases 450 were laparotomies; 388, or 86 per cent., were complete; 43, or 9.6 per cent., incomplete, and 19, or 4.2 per cent., complete failures. Of the 165 vaginal operations 150, or 91 per cent., were complete, 12, or 7.2 per cent., incomplete, and 3, or 1.8 per cent., failures. It may be noted here that 100 of the cases were total extirpation of the uterus on account of carcinoma, 74 of myoma, and 37 for affections of the adnexa. The greatest number of failures was in the larger operations, such as laparotomy, and may have been partly due to a faulty *technique*, as it usually occurred after opening the peritoneum, when chloroform had to be resorted to. It may have been due to the pressure in the abdomen influencing the diffusion of the drug. It is worthy of note that the greatest number of failures were met with in young persons; between the ages of 20 and 29 there were 105 cases with 7 failures, or 6.6 per cent.; between the ages of 30 and 39 there were 180 cases with 11, or 6.1 per cent. failures, while in a number of 204 between the ages of 40 and 49 only 3 cases, or 1.4 per cent. were met with; in 93 cases between the ages of 50 and 59 only 1 or 1.07 failed; and in 25 cases between 60 and 80 not one failed.

The after effects were more frequently observed in the young, as 10 per cent. complained of headache, but strange to relate the more nervous suffered least in this respect. One case was followed by paralysis of the abducens nerve, but recovered within two months. In two cases immediately following one another infection had been imported probably through the imperfect sterilisation of the salt solution which sometimes had been substituted by a soda solution in which the instruments had been boiled. Since then the sterilisation has been carried out without any addition of soda. One of these cases died from diffuse purulent cerebral meningitis, the fluid of which contained bacteria coli. The other case had all the typical symptoms of meningitis; by lumbar puncture a cloudy liquor was extracted whose sediment was purulent; in the intracellular matter were found fine rods, but no pathogenic bacilli could be identified. The puncture was repeated four times, and upwards of 80 c.cm. were extracted. On the twelfth day the fever was high, but after this rapidly fell, and the patient finally recovered. No other bad effects were observed from the spinal anæsthesia.

### A CORROSIVE IN THE URETHRA.

Spitzer exhibited a young man who had injected a solution of ammonium chloride in the urethra instead of the ichthyol solution, producing great pain, from which he fainted, followed by hæmaturia and strangury. Later, cystitis and epididymitis followed. Constant erection was so painful that neither bromides nor belladonna could relieve. Subsequently the swelling of the mucous membrane receded after seven weeks, but left strictures and urethral cystitis. With a bougie à boule four strictures along the hard tube can be detected. In the secretions are still found the gonococci.

## FROM OUR SPECIAL CORRESPONDENTS AT HOME.

### EDINBURGH.

**EDINBURGH CHAIR OF SURGERY.**—Professor Alexis Thomson delivered his Introductory Address on assuming the duties of his new office in the McEwan Hall, on Monday, October 4th. He was introduced by Sir William Turner, who paid a sympathetic tribute to Professor Chiene, the occupant of the chair for the preceding thirty years. Professor Thomson, who was enthusiastically received, said that, in undertaking the responsibilities of his position, he was encouraged by the help he had received from his esteemed and venerable teacher, Sir William Turner, and by the loyalty of his colleagues, some of them his former teachers, others his former fellow-students, and among these he was proud to include the new Dean of the Faculty. Dealing at the outset with the history of the Chair, he pointed out that it was of comparatively recent foundation. From 1771 to 1831 surgery was taught conjointly with anatomy. The first Professor of Surgery, John William Turner, officiated for only five years, and was succeeded by Sir Charles Bell, whose researches on the functions of the spinal nerve roots had perpetuated his name. Next came James Miller, the father of Mr. A. G. Miller, now one of the Consulting Surgeons to the Infirmary, who was followed in 1864 by James Spence, a most eminent surgeon and author of a standard work on surgery. Only Spence's imperfect appreciation of the possibilities of antiseptic surgery, which was being introduced towards the end of his professoriate, had prevented his skill as a surgeon from being more fully recognised. Spence was succeeded by John Chiene. Professor Thomson's knowledge of Professor Chiene went back to 26 years ago, when he was one of 300 members of his class. Since ever Chiene became attached to the University forty-three years ago he had been a living force and a tower of strength in the medical school. They honoured him for his teaching and example, and for the service he had rendered surgery in forwarding the doctrines of Lister. In Edinburgh of the "seventies" Chiene was universally recognised as the most ardent and faithful disciple of Lister. The surgery of the present was the product of evolution. In the classical era the practice of surgery and medicine was one; in the Middle Ages the physician retained some of his learning and dignity, while the surgeon was little esteemed, and surgery became a mere handicraft. A new era dawned when John Hunter left his Lanarkshire farm and went to London. Never again since Hunter's day had surgery been dissociated from physiology and pathology, and it was to advance in these essential branches of medicine that the progress of surgery in the first half of the 19th century was due. Surgical anaesthesia (the name they owed to the gifted author of "The Autocrat of the Breakfast Table"), that happiest gift to man, was a debt of the whole world to America and the surgeons of the Massachusetts Hospital. The name of Sir J. Y. Simpson would always be associated with anaesthesia, for he not only discovered the properties of chloroform, but rendered, by his own pen, memorable service in advancing its cause. Lister reformed the whole science of surgery, and it was one of the priceless possessions of their Alma Mater that he had perfected his theory and practice of antiseptics during his incumbency of the chair of clinical surgery. Next to the work of Lister and Pasteur, Koch's researches on the true nature of infectious diseases, and his discovery of the bacillus of tubercle had been the most fruitful of benefit to mankind. It was entirely due to the discoveries made in his branch of knowledge that medical science had come to be recognised as a worthy object of private and public endowment. Encouraging as was the growth of laboratory research no one familiar with the complexity of the problems at issue could suppose that the existing opportunities were adequate for the present and future needs of scientific medicine. They as a profession did not grudge the large expenditure required to maintain the naval and military forces of the Empire, nor the providing in old age for those

who were unable or had honestly failed to provide a competence for themselves, but they did desire that in the huge expenditure with which the country was charged that more should be forthcoming than the beggarly pittance at present granted for the advancement of those sciences on which the health and happiness of the people so much depend. Professor Thomson's introductory address was listened to attentively by a large and appreciative audience, not only of undergraduates, but of his professional brethren and colleagues, as well as of the general public.

**ELGIN COMMITTEE ON THE SCOTTISH UNIVERSITIES.**—Though nothing has been disclosed officially, the London correspondent of the *Scotsman* believes that it may be taken as certain that the report submits a strong case to the Treasury for a largely augmented grant. The total sum involved will, he states, probably involve upwards of £40,000, which is understood to be the figure at which the committee estimate the fair claims of the universities. It is believed that the extra grant advised to be awarded to Edinburgh and Glasgow is about £25,000, the sum mentioned for St. Andrews and Aberdeen being about £9,000 each. It is proposed to increase the salaries of the Principals to £2,000 in the case of the two former, and £1,500 in the case of the two latter universities. These recommendations do not, of course, commit the Treasury, and until they are approved by the Department they cannot be regarded as final.

### GLASGOW.

**A BLOT IN HOSPITAL ADMINISTRATION.**—The Chairman of Dumbarton Parish Council was inclined to blame Lord Advocate Ure the other night for the delay in remedying the condition of things in Dumbarton Poor-house Hospital. It is stated that 11 of the 41 patients there are in a very advanced stage of consumption, and that the present limited accommodation in the hospital necessitates their sleeping and eating with the other patients. The 13 parishes interested have long ago agreed, with the exception of one, to proceed with an extension of the hospital, and it lies with the Local Government Board to compel the non-consenting parish to agree also. Mr. Ure, however, is not a member of the Local Government Board. The Solicitor-General is. Hence Mr. Ure's phenomenal activity in addressing public meetings on the Budget has nothing to do with the case. But the condition of things in the hospital referred to is serious enough.

**DR. ROBERT POLLOK'S BEQUESTS.**—The writing left by the late Dr. Robert Pollok, recommending his residuary legatees, his sisters, to bequeath an endowment of £10,000 to the University of Glasgow for an original research lectureship in *Materia Medica* recalls the fact that he was at one time assistant to the late Dr. James Morton when the latter occupied the chair of *Materia Medica* in Anderson's College. This, we think, was the only teaching in which Dr. Pollok ever engaged. The same writing recommends the endowment with a similar amount of a ward in the Victoria Infirmary. It is stated that these recommendations will be carried out.

**CLOSING OF THE GLASGOW SKIN HOSPITAL.**—The Glasgow Hospital for Skin Diseases closed its doors on the 30th ult., its work having been transferred to the Western Infirmary. The directors are to hand over to the University a sum of £2,500 for the endowment of a lectureship in Dermatology, to be called the McCall Anderson Lectureship, as a memorial to the brilliant founder of the skin hospital, who died a short while since, after devoting fully forty years as physician to that institution.

**MEDICAL SCHOOL BOARD APPOINTMENTS.**—The September post-graduate course at the Glasgow Royal Infirmary has been an unqualified success. In anticipation of the part-time School Board appointments in Glasgow, open to general practitioners, many of them attended the courses of instruction in diseases of the eye, ear, nose and throat, and skin, which enhanced the value of the practitioners' application. It will be recalled that at a meeting of the Central Branch of the British Medical Association, in Glasgow, a resolution was almost unanimously carried, that practitioners were not to apply for the part-time school appoint-

ments, owing to what was deemed inadequate remuneration, but it appears that many who allowed that resolution to be carried without protest have been disloyal to the findings of the Central Branch, and did not withdraw their applications.

**LUNACY REPORT (GLASGOW).**—Dr. Carswell, Certifying Physician in Lunacy to the Glasgow Parish Council, has issued his annual report. From his statistics, which embrace a period of nine years, it would appear that while the proportion of pauper lunatics chargeable to Glasgow Parish was 314.7 per 100,000 of the population in 1901, it has risen to 371.8 in 1908. This increase, however, was accounted for partly by the fact that the increase of lunatics is a natural process with the increase of population. It is pointed out that the real test as to whether insanity is increasing or not is the number of persons who become insane for the first time. Since 1901 this has fluctuated without increasing. The report states that 51 fewer cases were dealt with during the past year, 578 were certified insane, of whom 303 were males and 275 females. Dr. Carswell regards syphilis and alcohol as the most potent causes of insanity from the ages of 25 to 50 years, and considers that syphilis is even more potent than alcohol. 193 patients who were certified insane were over 45 years of age. Dr. Carswell has the distinction of being the first medical man in Glasgow to open the wards in Duke Street Parish Hospital for the reception of insane patients where they undergo a probationary period of treatment before they are drafted to the asylums. In this way many patients recover who are presumably suffering from forms of insanity due to transient causes such as alcohol, and are saved the stigma of connection with asylum life.

#### BELFAST.

**INSPECTION OF MILK SUPPLY.**—The Public Health Committee of the Corporation decided last week to urge the Local Government Board to put into force in Belfast section 19 of part of the Tuberculosis Prevention Act. This would give the local authority power to inspect dairies outside their area, and is exceedingly desirable in the case of a large city like Belfast, a great part of whose milk supply comes from a distance. It is specially with a view to the prevention of typhoid that the order is sought for at present, but of course, it is equally desirable in the case of epidemics of diphtheria or scarlatina in the country.

**QUEEN'S UNIVERSITY.**—The winter session has begun, and the attendance of students promises to be a record one. Scholarship examinations begin on the 21st, and about £3,000 is now offered to the ambitious youth of the province. Of this amount £2,500 is offered by the Senate from the University endowments, and £500 is from private endowments. Lectures begin this week, and the house formerly occupied by the Registrar, Professor Symington, has been converted into a fine suite of rooms for lady students, in which they will have all the amenities offered to the men in the Students' Union, with the exception of a billiard room. The Building Committee of the Senate is busy with the preparation of plans for new buildings, but the rooms most urgently needed—that is, those for the lady students—having been provided, there is time to discuss the plans at length, and do nothing in a hurry.

**THE MEDICAL SOCIETIES.**—A new move has been made in connection with the medical societies meeting in Belfast, which should prove of benefit to all concerned. At the end of last session the secretaries of the Ulster Medical Society, the Ulster Branch of the British Medical Association, and the Belfast Division of the same, were instructed by those bodies to meet and make out a programme of meetings for next session, keeping to Thursday as the recognised day for medical meetings. This has now been done, and a convenient card of "medical fixtures" sent to all members of the three bodies, so that the days of meetings can be kept clear. The autumn meeting of the Ulster Branch will be held on November 17th, in the afternoon, and the annual dinner of the Ulster Medical Society the same evening, so as to give county members an opportunity of attending both.

## LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

#### "THE ADDENDUM PRANDII."

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—Dr. J. Sim Wallace's paper, which appears in your issue of October 6th, is in many respects admirable, and especially deserves praise for its lucidity. There is, however, one important statement that needs clearing up or more fully justifying. Dr. Wallace declares "that teeth do not decay except when the dietetic régime has brought the mouth into an unhygienic state." I have always held, and still maintain, what, as a student, I learnt from a well-known text-book—that the prime cause of caries is innate structural inferiority of enamel. This tissue varies in density in different subjects between limpid quartz, and sandstone, or chalk; whilst patches of inferior structure, or pits, or fissures allowing lodgment of minute decomposing particles are often found in teeth of otherwise first-rate quality. Oral hygiene, relief of overcrowding with assiduous dentistry will often permanently preserve sufficient members of an inferior set of teeth. On the other hand, given a well-formed jaw and teeth of first-rate structure, and often it will take a lifetime before decay shows itself, even although the owner of the apparatus has never possessed or even seen a tooth brush. Every dental surgeon sees in hospital and private practice illustrations of these facts—patients whose neglected teeth remain sound to the last; patients whose dental tissues are dissolved by the weak acid which the most indefatigable hygiene cannot prevent from being deposited between the teeth or within the flaws of their surfaces. Such flaws often penetrate deeply, and are not until carious visible except beneath the microscope.

I am, Sir, yours truly,

HOSPITAL DENTIST.

London, October 8th, 1909.

## OBITUARY.

WILLIAM RIVERS POLLOCK, M.D. CANTAB., M.D., F.R.C.P.

WE regret to announce the death of Dr. William Rivers Pollock, for many years Obstetric Physician and Lecturer on Midwifery at the Westminster Hospital. Dr. Pollock, who was the fourth surviving son of Mr. G. F. Pollock, formerly King's Remembrancer and Senior Master of the High Court of Justice, was born in 1859. He was educated at Haileybury and Trinity College, Cambridge, where he graduated M.B., B.C., in 1888. Three years later he obtained the Fellowship of the Royal College of Physicians and the M.D., Cambridge, in 1903. Devoting himself to the study of obstetrics, he became Examiner in Midwifery and Diseases of Women to the Conjoint Board of the London Royal Colleges of Physicians and Surgeons, London, and Cambridge University and London University. He held, besides the appointments at Westminster Hospital, the offices of Senior Physician to the Queen Charlotte Lying-in Hospital, Physician to the Grosvenor Hospital for Women and Children, and Professor of Midwifery to the Army Medical College, Millbank. He represented Cambridge in the hurdles in the Inter-University Sports in 1884, winning in what was then the record time, 16sec. Dr. Pollock married in 1889 A. Athol, the daughter of Mr. James Horne Stewart, of New South Wales, by whom he has left a son and a daughter.

GEORGE JOSEPH COOPER, M.R.C.S. ENG., L.S.A., M.P.

WE regret to announce the death of Dr. George Joseph Cooper, M.P., who was taken ill on returning to his house in Southwark Park Road early after leaving the House of Commons, died at 11 o'clock on the 7th October from a stroke of paralysis at the age of 65. There is little doubt that his death was indirectly due to the great strain which has been laid upon members during the present session. Deceased was

most active in the discharge of his Parliamentary duties, being early and late in his attendance at the House. His death deprives the medical profession of a valuable representative in Parliament, for Dr. Cooper was one of the few medical members not content to sink his profession in his politics. It is no secret that his death at this juncture has deprived the next birthday honours list of the name of a member of the medical profession.

Dr. Cooper was educated first at the Leeds Grammar School, and afterwards at Manchester and University College, London. He became a member of the Royal College of Surgeons, England, in 1867, and a Licentiate of the Society of Apothecaries four years later. He was formerly Resident Medical Officer of the Poplar Hospital for Accidents and the Bristol General Hospital. He was a member of the London County Council from 1888 to 1906, and had been Chairman of the Public Health Committee for six years. In 1906 he was elected member of Parliament for Bermondsey by a majority of 1,759 over Mr. H. J. C. Cust, the Conservative candidate. He lived a busy, strenuous life, and conducted a large practice in addition to his public duties.

## SPECIAL REPORT.

### THE FIFTH LONDON MEDICAL EXHIBITION.

The Fifth London Medical Exhibition organised by the *British and Colonial Druggist* has proved as complete a success as any of its forerunners. It was open from October 4th to 8th, and the usual condition of admission was observed, namely that visitors must be members of the medical profession and their immediate friends. As in previous years it was held in the Royal Horticultural Hall, Vincent Square, Westminster. Visitors were received and hospitably entertained by the Editor and staff of the enterprising journal to whose energy this interesting and valuable Exhibition owes its existence. The attendance this year was equal to that on former occasions, and its gratifying nature proved that the conditions were appreciated by members of the medical profession.

The Hall was so full of objects of direct and indirect interest to medical men that it would be hopeless to attempt to deal with them at all exhaustively. Reference, however, will be made to a few of the more prominent exhibits, and if any are omitted it should be clearly understood that the omission is due not to any lack of excellence or other attractive qualities on their part so much as consideration of space and the impossibility of dealing in detail with so great a mass of material.

On entering the Hall the visitor's attention was at once arrested by the handsome stall of Messrs. Brand and Co. There is no need to go at length into the meat essence and other preparations of this well-known firm. Their meat lozenges are well known to travellers, and are now likely to be useful to the aviators. They have a valuable product in Brand's Nutrient Powder, which consists of desiccated raw lean meat; also a fever food for the Tropics, containing essence of beef, cream and yolk of eggs. Another familiar name in connection with nutrients is the Liebig's Extract of Meat Company. At their handsome stall was a collection of exhibits, prominence being naturally given to Oxo and Nursing Oxo, which have gained a great and well-deserved reputation as scientific nutrients. Messrs. Cadbury Brothers were in evidence, as a matter of course, but the excellence of their cocoa and chocolate preparations have long since rendered their name a sort of classic in this particular direction. Their Cadbury's dairy milk chocolate and Bourneville chocolate may be specially mentioned. Publishers were represented by Messrs. Lippincott and Co., Messrs. Frowde and Hodder and Stoughton, and Messrs. Saunders and Co. Gautier Frères had a handsome little stall devoted to their excellent brandy. They represent one of the oldest

firms in the Charente, and their brandy can always be prescribed with confidence by medical men. Messrs. Fairchild, Bros. and Foster displayed their familiar preparations of pepsine and other digestive and nutrient products. Their Panopepton was naturally prominent. There is little need to remind anyone engaged in active medical practice that this product presents lean beef and wheat flour in a readily digestible and absorbable form. Pepsencia may be described as a sort of compound peptic extract. Their bile preparations should also be noted. Messrs. Burroughs Wellcome had a fine stall, full of well-known tabloid brand and other preparations and products, and medical and surgical appliances. We noted in particular their most convenient "Vaporoles," each of which contains a dose of some drug, such as strychnine in a green capsule instantly available for hypodermic administration. Their tabloid thyroid gland is now standardised so that the desiccated gland contains .2 of iodine in organic combination, a most important point in practical therapeutics. Messrs. T. Christy and Co. had a neighbouring stall full of objects of interest, many of these representing preparations familiar as household words to medical men, Glyco-thymoline for instance has a wide reputation in the treatment of catarrh of the throat and nasal mucous membranes. They exhibited a small machine, worked by a pump, capable of turning out about 8 lbs. of block ice per diem and a proportionately greater amount of ice water. The cost is £15, and the action depends on condensation of vapour by means of sulphuric acid. Messrs. Ingram and Royle had a specially artistic stand, showing specimens of various medicinal waters, such as Vichy, Contrexéville (Pavillon), Gies, Wübler, Evian-Cachet, and others with which their name is identified. Messrs. Parke, Davis and Co. made a fine display, amongst other things was the tuberculin ointment for cutaneous diagnosis, introduced by Dr. Ernst Moro. A nodular eruption follows its inunction upon the chest of tubercular subjects. Their mercurettes are composed of metallic mercury made up in solid tablets with cocoa butter, and inunction is performed by rubbing the tablet upon the skin. The various vaccines of the St. Mary's Hospital, officially made by this firm, were on show, together with a large number of other things, elegant, practical, and many of them novel. The famous emulsion of Messrs. Angier was in evidence at another stall. Its published composition is 35½ per cent. petroleum, and 9 grs. of combined hypophosphites of lime and soda, with chemically pure glycerine, to the ounce. Messrs. Bendle, Ltd., have an excellent meat food under the name of Nutrovin. It is palatable, and analysis shows it to contain good materials in amount corresponding to its claims. Jeyes' Sanitary Compounds had their Cyllin compounds to the front at a handsome stall. They showed Cyllin pastilles for the throat, a valuable therapeutic product, Cyllin toilet soaps, and other preparations. Messrs. A. and M. Zimmermann had an attractive display. Among other elegant and useful preparations we noted urotropin, which still holds its ground as one of our most trustworthy urinary antiseptics. Another old friend is beta-eucaine, one of the best of local anæsthetics. Their Sublamin is a non-toxic and non-irritating mercurial preparation. A novel drug is Dr. Carl Spengler's "J.K." curative serum for tuberculosis. The Saccharin Corporation, Ltd., exhibited Novocain, used so extensively as a local anæsthetic, as well as in spinal anæsthesia and dental surgery. Novocain, it should be clearly understood, does not contain cocaine. The same firm showed some exceedingly fine brandy (P.G.B.), specially for invalid purposes. It is a matured brandy procured by distillation from the wine of Spanish grapes, and is sold at a price that should command a wide demand for so sterling a sickroom requisite. The British Diamalt Company showed their product, "Diamalt," which is essentially a malt extract of guaranteed purity and high diastasic value. It is also sold in combination with cod-liver oil. Messrs. Findlater showed a number of table and medicinal waters, among which may be named "Martigny," obtained from a place near Contrexéville, and "Wildungen," a famous German water. "Cara-

banana" is a Spanish aperient water, containing a large proportion of sulphate of soda. Among Messrs. Seabury and Johnson's preparations, were the standard gauzes, packed in airtight sterilised containers. There were the well-known oxide of zinc ribbon plasters, and many other plasters, absorbent cottons, and other things. Emol Keleet is a natural dusting powder, well known to dermatologists for its soothing qualities. This firm also displayed the famous Thermogene wool and California Syrup of Figs. The Anglo-American Pharmaceutical Company, Ltd., showed their well-known preparation, Huxley's Syrup of Acid Glycero-phosphates, which contains pepsin, formates, hæmoglobin, red bone marrow, etc., which has been distinguished by the award of gold medals in various parts of the world. Betul-ol is useful in rheumatic affections. They also showed Fermentactyl, made up with a powerful strain of lactic acid bacillus and introduced by this firm several years ago, that is, before the present boom. Messrs. Menley and James, Ltd., showed "Glidine," a scientific protein food prepared from wheat, which is used as a basis of combination with iron, bromide, iodine, mercury, etc. These various preparations are put up in powder or tablet form, and sold under the names of Iodoglidine, Bromoglidine, Ferroglidine, etc. The corresponding mercurial preparation is named "Lusan." These glidine preparations are worthy of careful trial by medical men. The Maltine Manufacturing Company showed Carnrick's well-known liquid peptonoids, soluble food, and beef peptonoids and powder; also their Maltine, Maltine with cod-liver oil, Maltine with pepsine and pancreatine, Maltine with chocolate, and Maltine with cascara.

The antiseptic plastic dressing now so well known under the name of "Antiphlogistine," and so commonly used by the profession in inflammatory processes, was here exhibited in a very attractive way.

Mr. A. Wander, Ph.D., had an attractive show, with many objects of practical value to medical practitioners. His dry crystalline extract of malt is an excellent preparation, and can be given to children on bread and butter. His chief exhibit was Ovaltine, an excellent nutrient composed of maltine, chocolate, and yolk of egg, which claims to be a complete food. His Formitrol pastilles are excellent in taste and form as an antiseptic remedy for throat affections.

## MILITARY & NAVAL MEDICAL NOTES.

**THE RETIREMENT OF A POPULAR MEDICAL OFFICER.**—The retirement of Brigade-Surgeon Lieut.-Colonel C. E. Harrison, of the Grenadier Guards, and now in command of the Alexandra Military Hospital, Millbank, in the early part of October, cannot be allowed to take place without a few remarks. No more painstaking and courteous officer is to be found in the Army Medical Service. In season and out of it his heart has been, so to speak, in his work, and his dealings with all his subordinates, as well as with his patients, has been uniformly kind, sympathetic, and attentive. No mean responsibility and power are attached to a medical charge and command such as Lieut.-Colonel Harrison has had, and it is much achieved that acknowledgedly he has discharged the duties of his office to the satisfaction of all with whom he has been associated, be they of senior or junior rank. Lieut.-Colonel C. E. Harrison's example of work is worthy of copy by any medical officer. We wish him years of prosperity in his retirement. Although retired he will still be active.

**THE ARMY MEDICAL CORPS AND THE MANŒUVRES.**—The *Brook*, in devoting a leading article to the recent manœuvres, speaks in highly commendatory terms of the Royal Army Medical Corps. There can be no doubt that in recent years this corps has become vastly more efficient, due largely to the opportunities given for practical work.

This was the grave defect of the early nineties; no opportunities were then afforded for practical work on a large scale, and the material was scattered. It is also necessary to say that, with greater opportunities, the *personnel* has acquired more experience—indeed, there is room even for further development.

**INSANITARY MILITARY BARRACKS.**—A short paper appears in the *Naval and Military Record* on the disgraceful condition of some barracks occupied by our troops abroad and at home, founded chiefly on the recent announcement as to the building of new barracks for the British troops at Abbassia, Egypt, on the condemnation of the Kasr-el-Nil Barracks. One has only to look through the annual reports of the Army Medical Department for years back to see that our soldiers, in these days of sanitary enlightenment, are quartered in barracks unfit for human habitation, and live under conditions which would not now be tolerated under civil medical administration. Closely allied to defective barrack accommodation may be mentioned the overcrowding on troopships. There can be no question that this subject should receive immediate attention and reforms be instituted.

## MEDICAL NEWS IN BRIEF

### Opening of Queen Alexandra Sanatorium, Davos.

OUR great national sanatorium in the Alps, for the successful completion of which Mr. H. C. Wrinch, the local secretary, has mainly to be thanked for his unceasing labour, will be open for the reception of patients at the end of this month, although the inaugural ceremony is to be postponed until the winter season. On the visiting staff are the well-known names of Dr. W. R. Huggard, H.B.M. Consul in Davos, Dr. Arnold F. Bill, and Dr. Florian Buol; and the resident staff consists of Dr. Joseph W. Noble as Medical Superintendent, who has had considerable experience in Davos, and Dr. James Fairley as Junior Resident Medical Officer. The Matron, Mrs. Teesdale, who for some years past had the entire management of the Davos Invalids' Home, will be assisted by a small staff of English nurses with home sanatorium training. Although each patient occupies a separate room, the inclusive charge is only 38s. per week. Only early or convalescent cases are eligible. A large number of applications having already come in, candidates should not delay obtaining forms from the local secretary in Davos, Mr. H. C. Wrinch, or from the honorary secretaries in London, Dr. William Ewart, 31 Upper Brook Street, W., and Mr. D. A. F. Vesey, 3 Camp View, Wimbledon Common, S.W.

### State Insurance.

On the agenda for the annual meeting of the National Conference of Friendly Societies, which is to be held at King's Lynn on the 14th inst., is the Committee's report on the proposed scheme of State insurance against sickness, invalidity, etc. The Committee doubt whether it would be wise to join in an agitation against any proposals which lay down the principle that a working man shall make provision for himself, and those dependent on him in the days of health and prosperity by joining one of the sound friendly societies of the country, with the alternative that if he will not do so he shall be compelled to contribute to a Government fund. The Committee declare that they have, instead of organising a fruitless campaign such as that waged against Old Age Pensions, given their best services to ensure that the State scheme, if legislation is to come, shall be made a powerful auxiliary to sound friendly societies. In the absence of the detailed scheme, however, it would be wise to withhold a final judgment.

We regret to learn that Major J. C. Massy Wheeler, a well-known Indian officer attached to the 84th Punjaubis, has died in a private hospital in London while under an anæsthetic.



## NOTICES TO CORRESPONDENTS, &c.

✉ CORRESPONDENTS requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

### SUBSCRIPTIONS.

SUBSCRIPTIONS may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, £1s.; post free at home or abroad. Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially-appointed agents. Indian subscriptions are Rs 15.12. Messrs. Dawson and Sons are our special agents for Canada.

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CONTRIBUTORS are kindly requested to send their communications, if resident in England or the Colonies, to the Editor at the London office; if resident in Ireland to the Dublin office, in order to save time in reforwarding from office to office. When sending subscriptions the same rule applies as to office; these should be addressed to the Publisher.

EXAMINER (Staffs.).—(1) For the rapid and accurate microscopical examination of urine under the circumstances you describe, a centrifuge is indispensable. (2) We have found, on the whole, the cold nitric acid test the most convenient and trustworthy for the detection of albumin.

M. H. O. (Lincs.).—The slurring speech of intoxication and of general paralysis of the insane have a somewhat close slurred resemblance. Syllables are dropped and the words shortened—for instance, Mr. British Policeman becomes "Miss'r-Bri-sh-p'leesh'm'n."

RADIUM.—It has been lately stated that the price of radium has been artificially enhanced. Any leading surgical instrument maker ought to be able to procure the apparatus required.

A LAY READER.—We do not give medical advice or prescribe in these columns. To our present correspondent we can state that "hair falling off" may be due to several distinct causes, local or constitutional, or both combined; and any one treatment professing to cure all these conditions is, on the face of it, fraudulent. They can only be treated properly by qualified medical men.

STUDENT.—A dental surgeon needs, before everything, to be a first-rate handcraftsman. Unless he is a good operator, he cannot succeed. No academic distinctions will avail without this prime accomplishment.

## Meetings of the Societies, Lectures, &c.

WEDNESDAY, OCTOBER 13TH.

UNITED SERVICES MEDICAL SOCIETY (Royal Army Medical College, Millbank, S.W.).—8.30 p.m.: Lieut.-Colonel P. J. Freyer, I.M.S. (R.): Total Enucleation of the Prostate; Practical Observations on the Operations.

MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22 Chenies Street, W.C.).—4 p.m.: Mr. T. Walker: Clinique (Surgical). 5.15 p.m.: Lecture: Dr. G. H. Savage: Moral Insanity.

NORTH-EAST LONDON POST-GRADUATE COLLEGE (Prince of Wales's General Hospital, Tottenham, N.).—Clinics: 2.30 p.m.: Medical Out-patient (Dr. T. R. Whipham); Skin (Dr. G. N. Meachen); Eye (Mr. R. P. Brooks). 3 p.m.: X-Rays (Dr. H. Pirie).

THURSDAY, OCTOBER 14TH.

ROYAL SOCIETY OF MEDICINE (OBSTETRICAL AND GYNÆCOLOGICAL SECTION) (20 Hanover Square, W.).—7.45 p.m.: Presidential Address: Dr. H. Macnaughton-Jones. Dr. J. M. Munro Kerr: A Case of Placenta Prævia in which it was deemed advisable to perform Cesarean Section. Dr. J. Curtis Webb: Points on the Use of, and Indications for, Electro-therapy in some Gynæcological Affections.

MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22 Chenies Street, W.C.).—4 p.m.: Sir Jonathan Hutchinson: Clinique (Surgical). 5.15 p.m.: Lecture: Mr. L. Mummery: The Diagnosis and Treatment of the More Serious Forms of Colitis.

NORTH-EAST LONDON POST-GRADUATE COLLEGE (Prince of Wales's General Hospital, Tottenham, N.).—2.30 p.m.: Gynæcological Operations (Dr. A. E. Giles). Clinics: Medical Out-patient (Dr. A. J. Whiting); Surgical (Mr. Carson). 3 p.m.: Medical In-patient (Dr. G. P. Chappel). 4.30 p.m.: Lecture: Mr. W. Edmunds: Surgery of the Blood Vessels.

FRIDAY, OCTOBER 15TH.

ROYAL SOCIETY OF MEDICINE (ELECTRO-THERAPEUTICAL SECTION) (20 Hanover Square, W.).—8.30 p.m.: Presidential Address: Dr. Samuel Sloan: Electro-therapeutics in Gynecology.

SOCIETY OF TROPICAL MEDICINE AND HYGIENE (11 Chandos Street, Cavendish Square, W.).—8.30 p.m.: Discussion on Recent Advances in our Knowledge of Sleeping Sickness.

ROYAL COLLEGE OF SURGEONS OF ENGLAND (Lincoln's Inn Fields, W.C.).—5 p.m.: Prof. Keith: Specimens illustrating Various Forms of Constrictions and Occlusions Found in the Course of the Alimentary Canal. (Museum Demonstration.)

MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22 Chenies Street, W.C.).—4 p.m.: Mr. W. Stuart-Low: Clinique (Ear, Nose, and Throat).

NORTH-EAST LONDON POST-GRADUATE COLLEGE (Prince of Wales's General Hospital, Tottenham, N.).—10 a.m.: Surgical Out-patient (Mr. H. Evans). 2.30 p.m.: Operations. Clinics: Medical Out-patient (Dr. A. G. Auld); Eye (Mr. R. P. Brooks). 3 p.m.: Medical In-patient (Dr. R. M. Leslie).

TUESDAY, OCTOBER 19TH.

W.C.).—3.45 p.m.: Lecture: Mr. Chicbele Nurse: Middle Ear Labyrinth.

## Appointments.

COOKE, CHARLES JAMES, M.D., M.Ch., B.A.O.R.U.I., Medical Officer to the Board of Trade at Plymouth.

DESPREZ, H. S., L.R.C.P. and S.Edin., L.F.P.S.Glasg., Certifying Surgeon under the Factory and Workshop Act for the North Tawton District of the county of Devon.

EDWARDS, A. H., M.B., C.M.Edin., F.R.C.S.Edin., Dispensary Surgeon to the Western Infirmary, Glasgow.

GRANT, ROBERT, M.D.Aberd., Certifying Surgeon under the Factory and Workshop Act for the Cromer District of the county of Norfolk.

NICOL, J. W., M.B., C.M.Glasg., Physician for Skin Diseases in the Western Infirmary, Glasgow.

NORMAN, VINCENT P., L.M.S.S.A.Lond., Clinical Assistant to the Eye Department of the West London Hospital.

POIGNARD, R. N., M.B.Cantab., Certifying Surgeon under the Factory and Workshop Act for the Littleport District of the county of Cambridge.

TOMKINSON, J. G., M.D., Ch.B.Glasg., Physician to the Skin Dispensary of the Western Infirmary, Glasgow.

## Vacancies.

City and County of Nottingham.—Assistant Resident Medical Officer. Salary £130 per annum, with apartments, board, washing, and attendance. Applications to G. Muncaster Howard, Clerk to the Board, Poor-law Offices, Nottingham.

Royal Edinburgh Asylum.—Junior Medical Officer. Salary £125 per annum, with board, residence, and laundry. Applications to the Medical Superintendent, Royal Asylum, Edinburgh.

The Princess of Wales's General Hospital, Tottenham, N.—House Surgeon, £75 per annum; House Physician, £75 per annum; Junior House Surgeon, £40 per annum; Junior House Physician, £40 per annum; with residence, board, and laundry. Applications to Fredk. W. Drewett, Director. See advt.)

Nottingham General Dispensary.—Assistant Resident Surgeon. Salary £160 per annum, with apartments, attendance, light, and fuel. Applications to C. Cheesman, Secretary, 12 Low Pavement, Nottingham.

Lincoln Mental Hospital, The Lawn, Lincoln.—Assistant Medical Officer. Salary £150 per annum, with board, etc. Applications to the Medical Superintendent.

Brighton, Hove, and Preston Dispensary (Northern Branch).—Resident Medical Officer. Salary £160 per annum, furnished rooms, coals, gas, and attendance. Applications to the Assistant Secretary, 113 Queen's Road, Brighton.

Birmingham General Dispensary.—Resident Surgeon. Salary £200 per annum, including cab allowance. Applications to Ernest W. Forrest, Secretary, 32 Union Street, Birmingham.

Westminster General Dispensary.—Resident Medical Officer. Salary £120 per annum, with rooms, gas, coal, and attendance. Applications to the Secretary, 9, Gerrard Street, Soho, W.

The Children's Hospital, Temple Street, Dublin.—House Surgeon. Salary at the rate of fifty guineas per annum, with extras. Applications to Hon. Secretary, Medical Board. (See Advt.)

## Births.

GERRARD.—On Oct. 5th, at 28 Church Road, Richmond, Surrey, the wife of Lieut.-Colonel J. J. Gerrard, M.B., R.A.M.C., of a son.

HUME.—On Oct. 5th, at Lahore, India, the wife of Norman H. Hume, Indian Medical Service, of a son.

MINOCH.—On October 4th, the wife of William C. Minoch, M.D., 4 Kenilworth Road, Dublin, of a son.

PEACOCK.—On Oct. 6th, at Steeple Aston, Oxon, the wife of Dr. W. E. Peacock, of a son.

## Deaths.

CARNEGIE.—On Oct. 1st, at Darlington, Douglas John Carnegie, M.A.Cantab., son of the late John Carnegie, M.D., of Chesterfield, aged 46 years.

CARTER.—On Oct. 5th, at Billericay, Essex, Frederick Carter, M.D., J.P., in his 69th year.

WANSTEAD.—FINE CORNER POSITION, SUIT MEDICAL GENTLEMAN.—Six bed and dressing rooms, bath room, five reception rooms. Large garden. Price freehold, £1,250. Apply Messrs. Protheroe and Morris, 67 and 68, Cheapside, London, E.C.

# THE MEDICAL PRESS AND CIRCULAR.

"SALUS POPULI SUPREMA LEX."

Vol. CXXXIX.

WEDNESDAY, OCTOBER 20, 1909.

No. 16.

## NOTES AND COMMENTS.

**The Suffragettes and Lunacy Statistics.** IN a recent issue we hinted our doubts of the mental sanity of any woman who deliberately attempted to starve herself to death because a Parliamentary franchise was not granted to her sex. Nor is it easy to imagine any more flattering explanation of the psychical power that transforms a gentle, well-bred woman into a raging propagandist, smacking the faces of policemen, shrieking, tearing, scratching, biting, cutting down barricades with axes, smashing windows and hurling down tiles from rooftops on the heads of innocent bystanders. Surely and of a truth that way can hardly be sanity. Yet the lunacy returns of the London County Council do not point to any marked increase of insanity amongst women. On the other hand, they show that there is apparently a great increase of insanity among the population year by year, and the increase is greater among the men than among the women by 4 or 5 to 1. The Asylums Committee of the Council say in so many words they do not think there is any reason to conclude there is any great real increase of insanity. The Suffragette, however, is not likely to be hindered by any cold reasoning of that kind from her conclusion that men are getting madder than women by 4 to 1, and that the whole population is getting madder every year, so that the ascendancy and survival of the saner sex—to wit, woman—is only a question of time. By the way, many of these male lunatics have been kept alive by forced feeding, what view do the Suffragettes take of the ethics of that asylum procedure? Should the patients be released, fed by tubes, or allowed to die in their own way?

**The Humour of the Situation.** WHAT is to be the alternative to forced feeding in our criminal prisons? If a precedent is to be adopted in the case of Suffragette offenders, it must be generally applied, for the law makes no distinction of persons. Both points may be seriously put to the medical gentlemen who have publicly stated, in effect, that there are certain undefined dangers attached to that method of keeping refractory prisoners alive. Authority is dear to the feminine mind, and on the strength of that professional pronouncement every Suffragette in the United Kingdom is ready with dark suggestions and forebodings as to the ill-effects of forced feeding. No amount of authority, however, is likely to convince the trained professional mind that there is any

substantial danger involved in the introduction by a skilled medical man of fluid nutriment into the stomach by means of a soft rubber tube and a funnel. We can say on incontrovertible information that in the prisons of the United Kingdom such feeding is invariably administered by the prison medical officers, and that the stomach pump has long ago been discarded in favour of the soft tube and funnel. The amount of risk present under those conditions is of the smallest, and certainly nothing at all to be compared with the deaths that follow, let us say, abdominal or brain operations. For all that one would imagine from the outcry that has been raised in certain quarters that prison feeding should be regarded as one of the most serious capital operations of the surgeon. If there be any such attendant risk it should surely be demonstrated beyond cavil to the medical profession. Meanwhile, the humour of the situation is worthy of the pen of a Rabelais.

**A Representative Hospital Fund.** THE yearly appeal of the Metropolitan Saturday Fund is interesting in various ways. The pioneer of this great movement towards the co-ordination of medical charity, has now reached its thirty-fifth year of existence. The organisation has to a great extent retained the support on which it was originally based, namely, that of the working classes. Its watchword may truly be said to be "Self-help," and the spirit of the Saturday Fund has infused the friendly societies, the workmen's clubs, and the employees of post office, London County Council, and almost every large business undertaking, whether Governmental, municipal, or private, in the metropolis. Early in the present year a sum of £27,332 was distributed among the metropolitan hospitals and kindred institutions, a larger sum than had ever before been disbursed. There are several reasons why the Metropolitan Saturday Fund deserves the support of all who are interested in the solid progress of medical charity. First and foremost we should place the vital fact that its control is purely representative. It is, in fact, governed by a joint board of representatives from the contributors and from the hospitals. This constitution contrasts sharply from that of the Sunday and the King Edward VII. Funds, both of which are practically ruled by a knot of irresponsible persons, with the inevitable risks of a resulting arbitrary, inconsistent, and it may be at times even an unfair policy of administration. The second great virtue of the Saturday Fund arises indirectly from the former, namely, that it is an ardent supporter of the hospitals, the representatives from which get on the board.

**Why Should  
not the  
Funds be  
Under  
Popular  
Control?**

It is difficult to understand how any great public body, more especially one that has to deal with vast sums of money, should object to the principle of popular representative control. Any other method smacks of mediæval times, and is absolutely out of touch with the character of the bluff Englishman, who always has, and always will in the long run, insist on having a voice in the spending of his money. As things stand the two younger, and reputed wealthier Funds, are governed by councils in which philanthropy (in some cases of the professional order) and the great hospitals have an undue influence. It is not more than fifty years ago that the Royal College of Physicians of London were asserting their claim to hold all the hospital appointments in London. The last fight against that absurd claim of privilege took place over St. Mary's Hospital. Nowadays the College keeps a tight grip over most of these posts by the condition that is imposed in the hospital laws demanding a higher qualification of the London College as a necessary condition of candidature for a physician's post. The large hospitals are to-day strongly represented on the King Edward VII. and the Sunday Funds, but not the less important ones. Is there any solid reason why this should be the case? What are the views of those two great Funds as to the practical monopoly of the big hospital posts by the holders of London College diplomas to the exclusion of the Scotch and Irish, not to mention a whole sheaf of University degrees?

**Kingston  
Medical  
Officer of  
Health.**

A PROPOSAL has been started to promote a public testimonial to Dr. Collins, the Kingston Medical Officer of Health, in recognition of his sixteen years' service. The movement seems to have been promoted by the fact that the Town Council, at a meeting held *in camera*, decided to reduce his salary by the sum of £55 a year. No public explanation has been offered as to this unusual procedure; the only complaint that has ever been made concerning Dr. Collins is, that he is too zealous in carrying out his duties, and particularly that he recently recommended the alteration of certain schools in the borough which would have involved considerable expense. There seems no reason to doubt the truth of this story. It illustrates once more the deplorable position of the average medical officer, so often discussed in these columns. The testimonial will no doubt gratify Dr. Collins; but it would have been more satisfactory to him, and very much better for the borough, if the burgesses of Kingston had displayed a due amount of local patriotism, and had so ordered things that the Town Council should not be dominated by men capable of thus gratuitously venting their spleen upon a capable, conscientious, and trusted public servant.

**The Quality  
of Borough  
Councillors.**

THE Borough Council elections, all over the country, are held next month, and it depends everywhere upon the quality of the men elected as to how much of the mass of legislation devised to promote social reform and progress shall be carried out. The wisdom and zeal displayed in working sanitary laws, disregard of which inflict the greatest hardship upon the poor, vary widely in different districts; in few are the laws rigidly enforced; in many they are almost completely disregarded. The Bishop of

Stepney and Canon Barnett delivered weighty speeches on this subject last week. The Bishop gave his experience as a vestryman and guardian some years ago, and referred to the apathy of the public in local affairs; they were astonished and horrified when a public scandal was unearthed, but would not cross the road to vote at an election. Local government ought to be kept free from party feeling. What are wanted on local bodies are earnest, public-spirited men, but these will not come forward without encouragement and support from the mass of electors. Democratic institutions cannot be properly worked unless all that is good and best among the citizens will directly or indirectly take part; at present they are not, as a whole, performing this duty, and their apathy constitutes a serious danger to the commonwealth.

**Court Fees  
Before or  
Not Before?**

"GET your fee before you are sworn" is no doubt an admirable maxim for medical men who live in the country far from the maddening crowd, where the incidents connected with their practices seldom get into the hands of lawyers. It is a little doubtful, however, if it is wise for practitioners in the larger towns to adhere closely to the same rule in medico-legal cases. To demand money down under such circumstances would be never ending, for modern legislation binds up medical matters more and more in Acts of Parliament; the motor car has made the old common law "running down case" a normal occurrence *de die in diem*; sanitary and feeding questions are arising in every town. Now all these things are the bones of legal medicine, which no longer simply comprises murder, rape, and lunacy, as the forensic medicine books would have us believe. There is, accordingly, a large and lucrative branch of practice open to the general practitioner in London and provincial centres as real as midwifery, and far less exhausting. When a man beginning practice sits down behind his brass plate he does not say to the first patient who comes, "Your fee first," and it is for every practitioner, in places where medico-legal work is likely to be fairly plentiful, to consider whether he will say it to the first solicitor who comes to him. It is very certain that a medical man who can be trusted by solicitors to give them sound scientific advice and explanation in cases involving medical knowledge will not so very much regret, in the long run, a few cases in which he has not been paid his fee. A solicitor is a business man, and is very unlikely to be mixed up in a series of cases where, in the end, there is no money at all.

## LEADING ARTICLES.

### RELIGION AND MEDICINE.

THE sole legitimate function of religion in relation with the practice of medicine is to bring to the sick and suffering fortitude, patience, hope, and consolation. This fact, which has been always insisted upon in these columns, will, it seems probable, continue to be accepted by the vast majority of the Anglican clergy. After all, an average English parson is mainly dominated by common sense, in spite of the theological bias to which his often too narrow education and training may tend. It is not, therefore, surprising to find that the effort made by a small section of the Church to trespass beyond their proper domain is not apparently gaining much support. The meeting held last week of the Church and Medical

Union was very poorly attended, and the Union can so far boast of not more than eighty members all told. The idea underlying and stimulating the activities of the members seems to have been summed up by one of the speakers. He declared "that there was a positive side to Christian Science, but that the first requisite was knowledge, which the Union intended to obtain, and give from the theological and medical standpoints." We agree that there is a positive side to Christian Science—a side of positive nonsense. This is the side that expresses the belief that diseases of every kind are distinct entities which can be expelled from the system by processes of mediæval thaumaturgy. All will agree that the requisite in dealing with disease evidently is knowledge in the form of a due acquaintance with physiology and pathology—the working of the human organism in health and under the action of morbid influences—knowledge which Christian Science repudiates or ignores. From the medical standpoint, and from the standpoint of everyone with a rudimentary knowledge of the fundamental problems, the question in every case of mental and physical suffering is first the question of diagnosis, what is the nature and true cause of the malady. In a certain number of cases the patient must, in the main, minister to himself. It is beyond the power of a physician to pluck from the memory a rooted sorrow, or to cleanse the bosom of that perilous stuff that weighs upon the heart. Such cases may well frequently seek and find consolation solely in religion; but it is nevertheless the physician's duty in every case that comes before him to make out as certainly as possible whether or not there be any physical basis for the trouble, or any functional disturbance due to it. He has always to consider what treatment may be required for functional disturbances arising from purely mental causes. Medicine takes full cognisance of the mutual influence of mind and body; and a change of climate, a change of habit, a course of baths, and a special dietary are all much *materiæ medicæ* as any common drug in the *pharmacopœia*. It must, however, be borne in mind always that the majority of cases in which mental depression of any kind forms the most prominent symptom are associated with pathological conditions, and to hand over such cases indiscriminately to purely spiritual ministrations would be to condemn most of them to prolonged suffering or to death. It would be easy to fill pages with illustrations of this fact; they are not necessary to the medical reader, but need forcibly presenting to religionists who, like the members of the Union, seem to have too much faith in what they designate as "spiritual healing." Take the cases of women first. In a vast number of these mental trouble is due entirely to disorder or disease of the organs of generation. This may be anything between simple *dysmenorrhœa* and organic ovarian disease, or cancer of the uterus. Women are prone to conceal these maladies, but unless discovered and promptly dealt with by the physician the result is frequently

disastrous, whilst no mental or moral influence can in the least interfere with their course. The same consideration applies to many other maladies affecting either sex. Many subtle organic diseases display mental depression as their most prominent or even single sign; many of them are amenable to medical art, and to this alone. In all phases of disease the mental state has its share in maintaining vitality; and no proof or illustration is needed of the power to withstand pain and to prolong life that is given to the patient who wills to live, and knows how to bear his suffering without fretfulness and useless complaint. The minister of religion, when he can induce such a state of mind, is performing the greatest service that his office allows of—and with this he surely may well be satisfied.

## CURRENT TOPICS.

### The Sale of Arsenic.

THE sale of arsenic in the United Kingdom is hedged in with many and minute precautions, indeed, it has a special Act of its own, but for all that there is room for improvement. The sale of arsenic for medical use is restricted to qualified chemists, who must enter the name and address of the purchaser, the quantity of the drug, and the purpose to which it is to be put, and other precautions. On the other hand, arsenic can be bought and sold freely by anyone in the shape of sheep dips, insecticides, or other horticultural and agricultural purposes. There can be little doubt that a levelling up of the Poisons Act would decrease the number of deaths resulting from arsenical preparations. It is well known that the extra precautions placed on Part 1 of the schedule to the Poisons Act have reduced the deaths from the more deadly poison in that class until they are actually less than those in the second or less dangerous class. It is well to remember, in connection with further amendment of the Act, that arsenic is actually sold at the present moment in certain notorious quack medicines, and that it may be bought freely in certain combinations put up by respectable drug firms, who print the formula and add a poison notice on the label. For all that, the fact remains that large and dangerous amounts of arsenic may be readily purchased in that form. Then, again, this deadly substance occurs in certain cancer pastes and in depilatories. We are of opinion that the use of arsenic in patent medicine should be prohibited under heavy penalties, and that it should not be sold in any proprietary medicine, formula or no formula, and should be dispensed by the chemist only on the authority of a recent and properly verified medical prescription.

### The Insurance of Motor Cars.

WE are very pleased to learn that the Insurance Committee of the British Medical Association has undertaken for the future "Motor Insurance" in addition to its other insurances. A company whose policy offers undoubted advantages has been selected, and, for the future, members of the Association will be able to obtain this policy at a dis-

count of 10 per cent. The terms of the policy, as we have said, appear to be most advantageous, but there is just one other point on which we think that the Insurance Committee should inform their prospective clients. The company in question is a most reputable one, and, during the time for which it has been in existence, it has, as we know from personal experience, given the utmost satisfaction to its clients. We believe, however, that it is a company which is owned by a few private individuals, and we have heard a doubt expressed as to whether, in the event of its being involved in financial difficulties owing to exceptionally heavy claims against it, its association with the name of "Lloyd's" would be of any practical value. It is a very serious matter to undertake the payment of all claims—unlimited in amount—for any injuries which may be inflicted by a number of motor cars on third parties. The number of cars insured will presumably be large, and the claims which might accumulate against the company in the course of a few days owing to untoward circumstances might be very heavy. We think, then, that it is the duty of the Committee to assure themselves of the financial backing which is behind the company, and to see that proper guarantees are given. The members of the Association should then be informed that this has been done. The step is none the less proper because, in this particular case, the *status* of the company may render it unnecessary, and we hasten to add that we are confident that such is the case. Ordinary business securities, however, cannot go on trust, and if the Committee wish to make their scheme a success they must take the course suggested. If they have already taken it, then they must announce the fact.

#### Some Dangerous Domestic Remedies.

THE evils of amateur doctoring were well shown at a Bolton inquest last week when a little child of three years died after her mother had administered four drachms of sweet nitre at her husband's suggestion. Medical evidence was given to the effect that the proper dose at that age was 12 drops, and that an overdose might result in heart failure. In adults the dose of 4 teaspoonsful might cause unpleasant, if not dangerous symptoms. Another remedy often used for a "cold" is spirits of camphor, a drug which is exceedingly dangerous in over dose. Both saffron and arnica are also apt to produce untoward symptoms when given internally. There are undoubtedly many infantile deaths caused by the administration of paregoric and medicines containing narcotics. The greatest havoc, however, follows the use of patent medicines of the class of soothing syrup, balsamic cough mixtures, pectoral balsam, and the rest, as well as by "teething" powders, which almost invariably contain mercury, and often set up convulsions and fatal gastric enteritis in children. As a matter of fact, it seems probable that not more than a small percentage of these deaths is attributed to its real origin. The risks involved in drugging children, even by apparently quite homely and simple remedies, are indeed great. Government might decrease the harm a good deal by insisting that

every proprietary drug should carry its formula on an outside label. Every wise housewife will confine herself to some half dozen remedies, such as magnesia, salts, castor oil, and liquorice.

#### A Receiving House for 'Lunatics.

AN important departure has been taken by the London County Council in dealing with lunatics. It has been resolved, upon the recommendation of the Asylums Committee, to establish a receiving house, wholly staffed and supervised by their own officers. The intention is that an alleged lunatic, pending lunacy proceedings, should be taken to the receiving house, where he could be retained by the medical superintendent for a period of three days, at the end of which time the alleged lunatic would either be discharged or brought before a magistrate. The superintendent would then report to the justice whether in his opinion the alleged lunatic should be sent to an asylum or detained in the receiving house. If the justice doubted that the case called for special asylum treatment, the usual proceedings under the Lunacy Act would be taken. The Council resolved that an application should be made to Parliament in 1910 to give effect to this proposal in the County of London. The step is one of considerable importance in dealing with mental disease. It substitutes scientific and skilled observation and treatment to the present haphazard system, whereby in some instances a grave injury has been inflicted upon the public as well as upon individuals. In dealing with the maladies of a large population like that of the metropolis classification and centralisation become essential principles of efficient administration.

#### The Effect of the Anti-Tuberculosis Movement on Irish Industries.

IT is well known that a great deal of the difference of opinion regarding the benefits or otherwise to be derived from the Tuberculosis Act, Ireland, is due to a very widespread opinion that the movement which resulted in the Act has also resulted in inflicting a great deal of harm on Irish industries and on the wage-earning capacity of the Irish people. It is therefore interesting to learn from a letter in the daily press from the pen of the Chairman of the Killarney branch of the Women's National Health Association that this opinion is not based on fact. The writer consulted various sources in order to obtain evidence as to whether the movement had affected (1) the tourist traffic in Ireland; (2) the sale of Irish industries; or had (3) been the means of preventing Irish people from obtaining employment in England. The general, and almost universal, trend of the answers received has been to show the contrary is the case. Messrs. Cook, the tourist agents, say that they have not heard of a single instance of a tourist being debarred from visiting Ireland because of the existence of the anti-tuberculosis campaign. The Wholesale Irish Lace Depôt report an increase in their trade, and a number of large English firms, such as Whiteley's and Harrod's say that, so far as they are concerned, there is no truth in the report that Irish men and women are not employed by them. It is, of course,

"cures" for, say, incurable kidney disease, or to destroy health and life by dangerous drugs sold by lying promises to cure this, that, or the other malady, or, haply, some four or five score assorted diseases? Nor is wonder lessened when we find that in religious or semi-religious journals the quacks find their securest stronghold. Why should not a self-respecting lay editor refer all advertisements of "cures" and remedies to a competent medical sub-editor?

An American newspaper, to its honour be it said, has excluded offensive medical advertisements from its columns. This step of the *St. Paul Pioneer Press* has been taken at considerable financial sacrifice, and the *St. Paul's Dispatch* later announced that it was going to "clean up its columns." This action was warmly commended by the *Journal of the American Association*. (a)

Another journal that has made an honourable stand against quack remedies is the *Australian Traveller*, the organ of the Commercial Travellers' Association of Australia. It is published by a body of business men representing all branches of commerce, and it deliberately refuses to make money out of quack remedies or drugs that "debauch and deprave."

They announce prominently:—

WE REFUSE THEM.

IMPORTANT NOTICE.

This paper will NOT advertise  
any MEDICINE (or the proprietors of)

Claiming to CURE:—

CANCER,  
CONSUMPTION,  
or other

ORGANIC DISEASE,  
DISEASES OF THE NERVOUS SYSTEM,  
BLOOD DISORDERS,  
FEMALE COMPLAINTS,  
NERVOUS DEBILITY.

Finally, when the time comes that the prosecution of irregular practitioners and of fraudulent remedies is systematically conducted by some responsible official, the risk to newspaper editors of being indicted for assisting in a criminal transaction, will, in all probability, speedily cleanse the British Press of this blot upon its escutcheon.

#### THE MEDICAL PROFESSION AND THE CLEAN NEWSPAPER.

The aggregate influence of the medical profession is enormous. If its members gave their united support to the clean newspapers, and denied it to those who inserted objectionable advertisements, there is little doubt they could make or mar the fortunes of many a journal. With this end in view, it would be, perhaps, feasible for the medical journals, or the British Medical Association, to publish a kind of *index expurgatorius*, marking the newspapers that medical men are advised to reject on the score of the insertion of objectionable advertisements; or, alternatively, perhaps the wiser plan would be to point out the journals free from reproach in that particular direction.

#### CORONER'S INQUEST.

The coroners admittedly exercise a good deal of influence in the control of quacks and quackery. By means of a direct object-lesson they are often able to assist in opening the eyes of the public as to the evils of the system. Indirectly they might greatly help in the suppression of quackery were they to hold more frequent inquests in cases of uncertificated deaths, and to maintain, if they have the necessary legal powers, a watchful eye upon the signatures to death certificates accepted by local registrars.

Coroners may do good in various ways, as shown

(a) May 15th, 1909, p. 1,589.

in the following case, which illustrates the use of a quack medicine for epilepsy. The inquiry was held by Mr. Braxton Hicks, upon the body of a journeyman baker, a sufferer from epilepsy, who spent 11s. weekly on patent medicine. This costly stuff was shown by medical evidence to consist of chloroform water, coloured by burnt sugar, and a few grains—an absolutely useless dose for epilepsy—of potassium bromide. The jury appended to their verdict of "Death from natural causes" a rider to the effect: "That they considered that the attention of the proper authorities should be called to the gross fraud perpetrated upon the public by the sale of these mixtures at exorbitant prices." The first obvious reflection on reading this rider is to ask, "Who are the proper authorities? Do any such authorities exist? Whose duty is it to take action on the indignant protests that come from the coroners and the criminal courts?"

#### THE REGISTRAR-GENERAL.

The Registrar-General can make it much more difficult for irregular medical practitioners to carry on their work if he insists upon a stringent rejection by local registrars of all signatures to death certificates other than by duly qualified medical men. In view of the varying practice and laxity that is from time to time revealed in newspaper reports, some official inquiry and strengthening legislation are desirable in the interests of the community.

#### THE POISONS' ACT.

The extension of the poisons schedule in the sale of drugs sold either alone or in combination for the treatment or cure of disease, would help towards the security of the public. There are many potent and dangerous drugs sold to the public in the form of patent or proprietary medicines which should never be prescribed except under the advice and control of a properly qualified medical man. There is no need to go at length into the list of such drugs, but a few may be mentioned, such as acetanilide, arsenic, opium, morphia, lead, strychnine, chloral, phenacetin, mercury and its salts. What candid person would hesitate to agree to an extension of the poisons schedule when told that such a drug as colchicine is sold for the treatment of female "troubles," (a) and that one-third of a grain has been known to cause death, and as it is excreted slowly from the body, and is therefore cumulative, its administration in repeated doses in pill form is attended with serious danger? It is true that when a proprietary medicine contains a scheduled poison, the word "Poison" has to be printed on the label. The drawback to the proprietor that would be inflicted by so damaging a notice, however, is readily overcome by using type so small as to escape anything but the most careful scrutiny.

(To be continued.)

## SOME THOUGHTS ON CAUSATION IN HEALTH AND DISEASE. (b)

By LORD JUSTICE FLETCHER MOULTON.

LORD JUSTICE FLETCHER MOULTON, having distributed the prizes, began his address by saying that he knew the value of special study in any branch of science, and how presumptuous it was for those who had not trodden that toilsome path to venture to speak to those who had. But he claimed that he had been a close observer of those advances in science from the time when he first, at college, read the lectures of Lord Lister on the introduction of antiseptics into surgery. He thought he could best occupy their time if he put before them the picture which, during all those years, had gradually painted itself on his mind of the interaction between ourselves and that other world by which we are surrounded. He would aim at showing how those great scientific discoveries which would always make our age famous shaped themselves

(a) "Australian Report," 559, p. 24.

(b) Abstract of Opening Address at the School of Medicine, Leeds University, October 2nd, 1909.



to the mind of a humble looker-on, and if he might choose a distinctive title for his address he would steal the title from Robert Browning, and call it "How it strikes a contemporary."

In reviewing the 40 or 50 years that have elapsed since the birth of the new conception of the nature and causation of infective disease, Sir Fletcher Moulton roughly divided the period into two epochs, in the first of which scientific thought concerned itself mainly with the attack of these our unseen enemies, and in the second with the defence. The new knowledge, he said, early showed that it brought with it new power, and some of its most brilliant practical applications belonged to the first period. On the other hand, our knowledge of the organisms that attack us was still being added to, and much yet remained to be done in this field. The ascertainment and the comprehension of Nature's defence against micro-organisms came long subsequently to the discovery that to their action were due the numerous infective diseases to which man and animals are subject.

At some length and in great detail the lecturer considered the record of the last 40 years. Summing up that record as he had presented it, he said that science began by teaching us that we live as it were immersed in a sea of minute life, that micro-organisms are all around and upon and within us, that they are to be found not only in air and in water, but upon almost everything that we touch, that while some are harmless and possibly beneficial to us, some are our deadly enemies. It had since convinced us that all infectious diseases, as well as many that are not infectious, are due to these microbes, indeed that there are few diseases which are not either originally caused, or at some later period aggravated, by their presence. "Life," he continued, "is one ceaseless war against these enemies, and the periods of our too transient successes are known as health. This condition of constant and deadly strife not only obtains during our own short lives, but must have equally obtained throughout the long line of development of which we are the result. Yet the victory has not wholly rested with our foes. Our very existence is proof that Nature has at all events learnt how to conquer as far as she needed, that is, she has not let the individual succumb too early for the continuance of the race. We have seen how formidable her task is. She cannot effect it by isolation, for we derive our sustenance from without. The need of breath and nourishment compel free inter-communication with the external world, and we must accept its attendant microbic dangers." The choice within was equally fettered. In the life of nations, the arts of peace on which the existence of the people depended must be paramount; war was only necessary to them to assure the possibility of their continuance. Just so in the organism, the task of nourishing the cells of the body stood first; it must be performed at all costs and at all risks. Nature must defend the organism under the conditions of an uninterrupted flow everywhere of a fluid of the highest nutritious value, capable of satisfying all the wants of varied and highly specialised cells. And if nutritious to the cells, it must be liable to become food to microbes, who had to maintain their existence amid all sorts of environments unpampered by such delicate nursing.

There are, he pointed out, three main characteristics of Nature's solution of the problem. In the first place, she chooses the blood stream as the seat of the defence; nothing less than this universal environment suffices, because the mischief is equally wide. In the second place, the defence is specific; it is directed in each case against the particular assailant and no other. In the third place, it was found that in the intervals of the attacks the defence lay in capacities, not, if he might use such a term, in actualities. In other words, it is the presence of the enemy that calls into existence the changes in the blood stream that repel him, and those changes are antagonistic only to that special enemy.

Nature's task is two-fold. The microbes generate toxins which will poison the organism if not neutralised, and the microbes themselves will multiply

to a fatal extent if they be not exterminated, or at least kept down. Her defence against the first of these dangers is the generation in the blood of a specific antidote to the specific poison. Her answer to the second is manifold, but it again is in the form of the generation of defensive substances in the blood. Sometimes the defensive substances are poisonous to the specific microbe; sometimes they cripple though they do not kill. But the defence upon which she seems above all to rely is the generation in the blood stream of substances which make the watchful white blood corpuscles devour that particular microbe with a greater zest until not even its tremendous power of multiplication can save it from destruction. Asking what could be the mechanism by which it was brought about that the poison generates instead of exhausts its antidote, and that the presence of the microbe leads to the production of a suitable condiment, and thus stimulates instead of satiates the appetite to devour it, his Lordship said: "To that I can unhesitatingly give the answer—I do not know. And for myself I might put it in the yet stronger form—I have not the slightest idea. To me the mechanism that underlies these paradoxical manifestations of life is an absolute enigma." But he uttered a note of warning: "Do not confuse the facts which are learnt by experiment with the hypotheses which are designed to explain them."

#### OUTDOING NATURE.

Finally, Lord Justice Moulton called attention to the curative power that the new knowledge places in man's hand. In the cases such as diphtheria and tetanus, where the poison is so powerful and so rapidly generated that it constitutes the main danger, we can gain for Nature the time necessary for calling her defensive forces into play by introducing from without supplies of the antidote which she herself has generated abundantly under more favourable circumstances. When a specific danger threatens in the near future we can by sterile inoculations into the organism while as yet unattacked rouse into actual operation its latent capacities for defence, so that if the attack should come it will find them in full play. But, above all, in that type of microbic disease from which humanity most frequently suffers, where the micro-organisms have located themselves so as to be more or less sheltered from the operation of the blood stream, and thus to avoid rousing its powers of antagonism, we can by like means stimulate the white blood corpuscles of the whole organism to fierce attack, and, as long clinical experience has shown, can little by little drive out the enemy from the position in which it has entrenched itself.

"In all this," said the lecturer, in conclusion, "we are adopting Nature's means in order to out-do her work. For you who will in the future exercise the high calling of a doctor must never forget that you have set yourself a harder task than that with which Nature contents herself. The sacredness of human life in our eyes compels us to keep alive those that Nature would let die, to produce health where she would accept disease, to make life possible under circumstances where she would abandon the attempt. She is satisfied if the efficacy of her defence would save enough. We seek to save all. But though you thus seek to out-do Nature you cannot effect that object better than by wisely supplementing, according to individual need, that which is done automatically by Nature in racial self-defence. In so doing you will be a useful ally to Nature, and fit to fight by her side, for you will have learnt to follow her tactics."

### SOME POINTS IN THE DIAGNOSIS AND TREATMENT OF BRIGHT'S DISEASE.

By JOHN T. MACLACHLAN, M.D. GLAS.,

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IN practice we meet with Bright's disease, under many guises, which renders its diagnosis often one of great difficulty, and explains how it is often overlooked

The acute form of the malady is easily enough recognised; but the atrophic, chronic type is insidious and easily missed. The usual history of a case of acute Bright's disease is as follows:—The patient has had a good wetting, and in a few days, thereafter, he notices his legs are swollen, and that his urine is diminished in quantity. Some of his friends may observe that his face is swollen. He feels cold "creeps" down his back and has difficulty in getting properly warm. The physician finds marked œdema present, and that the features have lost the sharp lines of health. The lines of expression on and around the nose, under the eyes, and round the mouth are obliterated. The eyelids are saggy and puffy. Evidences of œdema may be found in the internal organs, such as moist crepitation over the base of the lungs.

The urine when boiled may go almost solid with albumen. The specific gravity is not reduced, owing to its density being more than maintained by the great amount of serum albumen it contains. Under the microscope a drop of the sediment shows numerous casts—moulds of the uriniferous tubes of the kidney, which may be studded with leucocytes, blood, and broken-up epithelial cells. The urea output may be reduced by one-half. The patient is listless and lethargic-looking, the face being pale and puffy. Usually, there is a large deposition of urates when the urine cools, and it will be observed that the urine very rapidly becomes turbid after it is passed, apparently due to organisms attacking the albumen in the urine.

The radial artery, when examined at the wrist, will be found to have lost its soft and pliable state, as in health. Its wall will be found tense, and the pulse will be short, and sharp, and jerking. All this was explained by Bright, George Johnson and others, as meaning that the arterioles contracted to resist the passage of impure blood through them. Owing to the close proximity of the supra-renal glands to the kidneys, it is unfortunate that (so far as I know) we have no definite knowledge as to their condition in Bright's disease.

The second sound of the heart is heard with undue distinctness, and is accentuated. The state of the pulse in a case of acute Bright's disease is a good guide as to the imminence of convulsions. If the pulse be exceedingly tense, convulsions may be predicted. Throbbing temporals and intense headache point in the same direction; and the urine may be reduced to a few spoonfuls, or temporarily suppressed. The pulse tension falls when the left ventricle gets dilated, but this condition is more frequently observed in advanced granular kidneys, and is one explanation how the condition is wrongly diagnosed. In the treatment of acute renal dropsy, a warm bed and a warm bedroom are of great importance. To flood the skin with blood relieves the congested kidneys. For this purpose, among others, I am in the habit of prescribing 5 minims of tincture of aconite along with 20 to 30 grains of citrate of potash every two, three or four hours, as the case may be. Aconite reduces the high arterial tension, relieves the congestion of the kidney, and a patient who is water-logged may undergo a marvellous transformation in two or three days. The urine rapidly increases in quantity, and 3 to 6 pints may be passed in the twenty-four hours. The dropsy is run out

through the kidneys—the natural channel of escape.

Milk is probably the best diet. It is not heating or stimulating, and is a good diuretic. Its diuretic quality is greatly enhanced by barley water, and half milk and half barley water is an excellent food and drink in these cases. It is not necessary to purge the patient, as is so often recommended. Nay, I consider it bad practice.

If the urinary secretion can be established, as Dickinson has so well taught, the kidneys will become unloaded, and the inflammation subside. Convulsions seem to me to occur more frequently in scarlatinal nephritis than in nephritis due to cold and wet.

I have found the application of leeches over the kidneys a very efficient mode of treating them. The milk diet may be continued for weeks, and then milk puddings, etc., added to the diet. Beef tea, I have known, cause hæmaturia in several patients, and, apparently, was toxic.

When a case of acute tubal nephritis comes under my care, I always tell the patient this is going to be a four months' job.

In looking back over my experience of acute Bright's disease I think I am safe in saying that full strength and health is not restored much under six months, and that with the patient being well charged with the astringent preparations of iron. It appears to me to be better to give a large dose of iron well diluted than frequent small doses, if it is desired to astringe the vessels of the kidneys; and this principle applies to hæmaturia as well as to albuminuria. In this way a greater quantity of the drug reaches the kidneys, and some impression is made on the condition. Thus 5 or 10 minims of tincture of iron is useless as a renal astringent.

Cirrhosis of the kidneys is such a chronic malady that it is almost impossible to say when it started.

The urine is comparatively pale, with a specific gravity of 1015 or under. If the urine be concentrated, and not more than 30 or 40 ounces be passed per day, the specific gravity may be 1020, and so be a source of fallacy in the diagnosis. Other things being equal, a persistently low specific gravity is diagnostic of atrophic kidneys. Thickened arteries with enlarged heart are corroborative of the diagnosis. Albumen may be present in small amount in the urine, and care requires to be taken in testing the urine.

When the urine is boiled, and then acetic acid added, it is absolutely necessary to boil a second time, else urine will be declared not infrequently non-albuminous, when it contains a distinct trace.

Some œdema can usually be detected in cirrhosis of the kidneys. Slight blurring of the facial lines is usually present. If the finger is vigorously pressed over the thin bone, pitting may be observed.

When the heart becomes dilated, passive congestion of the lungs and liver occurs, and gives rise to shortness of breath. The enlarged liver may be felt coming well down below the ribs, and may be tender. A tender liver in a man in comparatively good health is strong presumptive proof of alcoholism. In this way, secret drinkers among men and women may be found out.

It is not always easy to find casts in the urine from cirrhotic kidneys. The typical cast is the granular one. In dilatation of the heart hyaline

casts are the rule. They are simply due to passive congestion of the kidneys. A patient with cirrhosis of the kidneys may seek advice for headache and vertigo, for cough with bronchitis and passive congestion of the lungs; for persistent dyspepsia with gastric catarrh; for shortness of breath from cardiac failure; for insomnia and nocturnal restlessness from uræmic poisoning; for hæmaturia, presumably due to the damaged state of the vessels of the kidneys.

Nothing very certainly is known regarding the etiology of chronic Bright's disease, except as Dickinson observes, that residence in a temperate climate seems a strong predisposing cause of it.

It has not been definitely proved that alcohol causes cirrhotic kidneys, although a bout of alcohol drinking causes albuminuria and puffy face. Lead poisoning is held to be a cause of atrophic kidneys. I have known a few painters who died of cirrhotic kidneys. The question of the relation of syphilis to cirrhosis of the kidneys requires elucidation. It may be a fertile cause of the disease. Cirrhosis of the kidney is a not infrequent complication of the gouty state.

The general treatment of cirrhosis of the kidneys is as follows:—

1. The skin should be utilised as much as possible to relieve the kidneys; this may be effected by residence abroad, or by clothing, or the use of hot or Turkish baths at home.

2. Diet should be light, excluding red meat.

3. Iodide of potash with tonics seem to me to be the most reliable drug to employ, and may be persistently used for months. It reduces blood-pressure. I have known it stop attacks of Cheyne-Stokes breathing in an advanced case of cirrhosis of the kidneys.

There are many patients with stiff arteries and with renal changes, who are not typical cases of chronic Bright's disease, and belong to Gull and Sutton's group of arterio-sclerosis. Of five cases that I have classified as instances of arterio-sclerosis, occurring in working men and who have had attacks of cerebral hæmorrhage, four have kept free from a second attack of cerebral hæmorrhage, and one has had a slight relapse. They were all put on the following diet, and told to avoid strictly red meat and ham.

*Diet Allowed.*—Porridge, milk, eggs, fish, the gravy of cooked meat, vegetables, bread and butter, cheese and milk puddings and fruit. On this diet alone two cases, that were carefully watched, in three months showed great and decided improvement as regards the pulse, condition of radial artery, and feeling of well being. They afforded me strong presumptive evidence, that the way to avoid cerebral hæmorrhage lies in a lacto-vegetarian dietary. The juice or gravy of meat, while relieving the monotony of the diets did not seem to prejudice the result.

## OPERATING THEATRES.

### ST. MARK'S HOSPITAL FOR DISEASES OF THE RECTUM.

**BALL'S OPERATION FOR PRURITUS ANI.**—MR. LOCKHART MUMMERY operated on a man, æt. 29, who had been admitted suffering from severe pruritus ani, for which he had been treated for six years without any material relief. On admission, it was decided, in view of the discomfort the affection caused him, and the apparent futility of local applications, that

the wisest thing to do was to perform Ball's operation. The patient having been anæsthetised by gas and ether, was placed in the lithotomy position, and two curved incisions were made starting one on each side of the median raphe of the perinæum, and about two inches in front of the anus, their concavity being towards the anus; they were so planned as to include the anus and about an inch-and-a-half of skin all round it. The flaps formed by these incisions were then dissected up towards the anus and the dissection continued to a point a little above the muco-cutaneous junction, so as to ensure the division of all the cutaneous nerves to the itching area. The strips of skin in front and behind the anus were undercut, as also was the skin of the buttocks to the outer side of the incisions. Thus, when the dissection had been completed, the flaps enclosed by the incisions remained attached by a strip of skin in front and behind, and by the mucous membrane of the rectum. All bleeding points were next clipped and twisted, and all hæmorrhage carefully arrested by hot water and sponge pressure. The flaps were then sutured back into their original positions, and a dressing of gauze and cotton wool applied so as to keep firm pressure upon the flaps. Mr. Mummery said that the principle of the operation was similar to that often performed in cases of trigeminal neuralgia, where the fifth nerve is divided in order to stop the pain. It was not possible, he pointed out, to divide the main nerves to the anal region and skin, but this operation secures the same end by the division of the cutaneous branches. The immediate result of the operation is to render the anus and the surrounding skin anæsthetic, and therefore to entirely prevent any further pruritus; the anæsthesia passes off slowly, and within from three weeks to a month sensation has more or less completely returned in the parts. The pruritus, however, does not recur. There have been instances where the operation has not been entirely successful, but it seems probable that these cases have been due either to inadequate operation, or to selection of unsuitable subjects. The operation, he remarked, was not quite so easy as it might appear, owing to the somewhat complicated shape of the flaps. It was necessary to be very careful not to button-hole the flaps, and, needless to say, the most rigorous asepsis was indispensable, both before and after the operation. Should hæmorrhage occur under the flaps, it was desirable to remove the stitches, empty out the clot, and re-suture the flaps in place. There was no risk of the flaps sloughing, providing sepsis can be avoided and care is taken not to cut the flaps too thin. Mr. Mummery stated that he had never heard of a case in which sloughing had occurred. The operation, he thought, was obviously more scientific than the older methods of applying nitric acid or the actual cautery, and had the further advantage that, beyond leaving a small scar, it does not in any way mutilate the patient.

**CANCER OF THE SIGMOID.**—The same surgeon operated on a man, æt. 53, who had been admitted suffering from cancer in the lower half of the sigmoid flexure. The growth had been detected by means of the sigmoidoscope before admission to the hospital. The abdomen was opened in the middle line, with the patient in the Trendelenburg position, and the incision was carried down to the upper border of the pubes. The growth was found to be situated just below the middle of the sigmoid flexure and to be adherent to the loop of bowel immediately below it. Clamps were applied to the colon above and below the involved portion, and the latter was cut away. The two ends were then brought out of the wound and sutured together end-to-end, two rows of sutures being used, the inner including all the coats and the outer the peritoneal and muscular coats only. After the suturing was complete the clamps were removed and the gap in the meso-colon sewn up. A small drainage tube was inserted down to the line of suture and the abdomen closed.

Mr. Mummery remarked that a difficulty often experienced in these cases was that after resection of the growth the lower stump of colon was so deeply situated in the pelvis that anastomosis by any of the

ordinary methods was quite impossible. Under such circumstances the surgeon had three courses open to him:—(1) To establish an artificial anus with the proximal portion of the colon, and to close the lower end. (2) To excise the distal portion of the bowel and bring the upper stump down to the anus if the length of the mesentery allowed of it. (3) To tie a tube into the upper stump and pass this down through the rectum and out of the anus, and so join the two parts together by invaginating the upper stump into the lower one. He referred to a published case of his own in which this had been successfully done. He pointed out that anastomosis of the bowel, where it involved the pelvic portion of the colon, differed considerably from anastomosis in other portions of the alimentary tract, in that faecal fistulae or rupture of the line of suture more frequently occurred. This was owing to the fact that the normal contents of the pelvic colon are solid, or semi-solid, and that, in consequence, a considerable strain might be thrown on the line of suture. In order to avoid this it was necessary to ensure that the colon was thoroughly emptied previous to operation, and that the first stool after operation was entirely liquid in character. Stenosis was very uncommon after anastomosis had been performed in the colon, and need not be anticipated.

The patient in this particular case had a little discharge of clear fluid from the tube for a few days, but no faecal fistula developed, and he left the hospital in good health, and with the bowels acting normally, in a little over three weeks.

## TRANSACTIONS OF SOCIETIES.

### THE ROYAL SOCIETY OF MEDICINE.

#### THERAPEUTICAL AND PHARMACOLOGICAL SECTION.

MEETING HELD OCTOBER 5TH, 1909.

The President, PROF. A. R. CUSHING, in the Chair.

SIR CLIFFORD ALLBUTT opened a discussion on the TEACHING OF THERAPEUTICS IN THE HOSPITAL WARD.

He said medical men must be pioneers, they could not afford always to wait for the pharmacologists: but there must be a mutual watchfulness of each other. Much that we know to-day to be good came from empirical knowledge; this is still going on, but our empiricism must be of the best, the knowledge of experience. He selected three examples of methods of treatment which had stood the test of modern research, but which came originally from folk medicine, viz., digitalis; vaccination which to-day had wonderfully expanded in other directions; and poultices, which after suffering a period of abuse, were, through the work of Bier, seen to be fundamentally reasonable. The student must be assured that, apart from pharmacological proof, there was a large tradition of empirical knowledge of great provisional service. He should be told that such and such are the means found useful in clinical experience, whether they could be scientifically explained or not. They were to go to the bedside as artists to do what they could for the patient with such lights as they had. Finally, the student must be told he has to deal with living realities. He must be

(1) Assured he must be no sceptic, or he would endanger his own resourcefulness.

(2) Given a clear idea of the *vis medicatrix naturæ*.

(3) Warned against the danger of the overuse of drugs, and shown how closely therapeutics depend upon prognosis.

Professor OSLER, F.R.S., gave an account of the methods adopted at the Johns Hopkins University, laying stress on the practical advantage thereof.

Dr. HARRINGTON SAINSBURY thought there should be more careful teaching of the History of Therapeutics, and of the present day acceptance.

Dr. CALVERT said that there was a lamentable ignorance of incompatibility, and of the ordinary

simple practical methods which should all be systematically taught in the wards.

Dr. HUTCHISON relied more on teaching the student to be a sound diagnostician than a pharmacologist, and suggested that the time was ripe for some uniform agreement on the main lines of treatment to be adopted in certain well-known diseases, such as gastric ulcer.

Professor DIXON insisted on the advantage to the student of a sound pharmacological knowledge; and he pointed out the rational value of administering alkaloids when strength and action were accurately known.

Dr. BEDDARD thought it was impossible to really teach therapeutics in the wards.

Sir DYCE DUCKWORTH emphasised the necessity of imparting practical instruction to the student, such as the giving of enemata, hypodermic injections. He deplored the multitude of new so-called remedies, many coming from abroad.

Dr. HACKNEY said the student should be taught how to manage a practice, keep books, and be given a general idea of ordinary routine work.

The PRESIDENT closed the discussion with a few remarks.

### WEST LONDON MEDICO-CHIRURGICAL SOCIETY.

MEETING HELD FRIDAY, OCTOBER 8TH, 1909

The President, NEVILLE WOOD, M.D., M.R.C.P., in the Chair.

PRESIDENTIAL ADDRESS ON "THE SELECTION OF PATIENTS FOR SPA TREATMENT."

THE PRESIDENT (Dr. Neville Wood) prefaced his remarks by a series of propositions in which he defined the aims of spa treatment, adding a classification of the cases typically suitable for it. He then referred in turn to the therapeutic factors common to all spas, and showed how each could be used to greater advantage in an organised health resort than elsewhere. He pointed out the difficulty of the exact regulation of diet in cosmopolitan hotels, and the growing tendency to send patients to dietetic sanatoria. Passing on to the subject of radio-activity in mineral springs, evidence was cited to show that radium "emanation" possesses a selective action in some morbid conditions. Reasons were adduced for the more striking results obtained from "suggestion" at a spa than in the ordinary consulting-room. The resources of the best known watering places for the treatment of special diseases were then submitted to examination, and the paper closed by some general remarks on the relative advantages of French and German health resorts.

## CORRESPONDENCE.

### FROM OUR SPECIAL CORRESPONDENTS ABROAD.

#### FRANCE.

Paris, Oct. 17th, 1909.

#### PYELONEPHRITIS IN PREGNANCY.

PYELONEPHRITIS is not a rare affection in pregnant women, but it may pass unnoticed, for the usual classical signs are frequently wanting.

It is especially in the first period, where pyuria has not yet set in, that the diagnosis is difficult. The symptoms may be confounded, says Prof. Brindeau, with some general affection, as grippe, typhoid fever, acute tuberculosis, and it is only after several days that the possibility of pyelonephritis strikes the attendant, when renal palpation and examination of the urine confirms the suspicions.

The treatment may be medical, surgical, or obstetrical, but, in any case, medical treatment should take the precedence, and consists in the prescribing of drugs to produce diuresis and antisepsy of the digestive tract, obtained, on the one hand, by milk diet and diuretic infusions, and, on the other, by

wafers of urotropin (10 gr. three times a day) or helmitol (15 gr. twice a day). The excretion of the urine in the 24 hours should be collected and examined as to transparency and quality. Where the total amount is under the normal, wet cupping in the lumbar region may be useful.

Generally the malady gets well after delivery, and, as grave complications are the exception, a few weeks may be allowed to elapse before considering the advisability of surgical interference. Where, however, but one kidney is affected, the temperature high, the general condition bad, and a renal tumour perceptible to palpation, nephrotomy may be indicated. Before proceeding, however, to this major operation, distension of the bladder, as practised by Pasteau, may give very good results. It consists in injecting, three or four times a day, a certain quantity of liquid (10 oz. of a warm solution of boric acid) into the bladder, and recommending the patient to retain it as long as possible.

Obstetrical treatment consists in interrupting the course of gestation on the principle that the malady has a tendency to get well spontaneously after delivery, but this treatment is rarely necessary. It will depend on the age of pregnancy and the condition of the kidneys. Where pyelonephritis is observed in the first six months of gestation, it is generally grave, and as the patient is still far from her term, abortion might be thought of, but where the malady is observed in the last three months, it is better to wait Nature's time.

To resume, pyelonephritis, although a serious affection, does not generally threaten the life of the patient, and operative measures should always be reserved for grave complications.

#### PLEURISY IN CHILDREN.

The treatment of pleurisy in children may be much simplified by the employment of the wet sheet. Over a thick and warm covering is laid an impermeable cloth, on which is placed a small wet sheet previously wrung out of water at 98° to 104°. The child, undressed, is rolled in the sheet, then in the impermeable tissue, and finally in the thick covering. The treatment may be renewed daily for a week. The first day the patient is left half-an-hour thus wrapped up, the second an hour, the third an hour and a-half, and the fourth two hours, after which the time is diminished each day by half-an-hour. By this method an abundant perspiration and diuresis are produced, and in the majority of cases the effusion disappears in seven or eight days.

### GERMANY.

Berlin, Oct. 17th, 1909.

At the Naturforscherversammlung, at Salzburg, Hr. Ludvig Meyer, Berlin, gave an address on THE ACTION OF THE MINERAL SALTS IN THE DISTURBANCES OF NUTRITION OF CHILDREN.

He said that the cause of the ill-thriving of infants lay in the whey of cows' milk. The salts which the body retained from the food served for the building-up of the system, for growth. Both cardiac contractions and muscular action depended probably on certain salts in the blood. Chloride of sodium and other salts of sodium accelerated increase of weight, potassium and lime salts retarded it. The temperature of the body could be very considerably influenced by salts. Certain sodium salts raised the temperature; potassium salts reduced it. Chronic intestinal catarrhs led in infancy to great reduction of the body weight; this loss of weight was due to the loss of the salts through the abnormally copious intestinal evacuations. The loss of salts might be so great that important functions might become disturbed and life rendered impossible. But even in severe cases it was possible to prevent the destructive loss of salts by giving women's milk, and so bring about recovery. The fever also that so specially accompanied acute intestinal diseases was possibly due to imperfect digestion of mineral salts in the intestine.

Professor Elster, Wölfenbüttel, spoke of THE PRESENT POSITION OF THE RADIUM QUESTION.

He said there were three kinds of radio-active rays

that could be made evident by their photographic, fluorescent, and electric action. The latter method was of a delicacy that was far beyond that of spectrum analysis. The millionth part of a milligramme of radium was demonstrable by the test of electricity. The three kinds of radio-active rays were distinguished by the names of alpha, beta, gamma rays. The gamma rays were of greatest penetrating power; they were not influenced by the magnet, and in this they were nearly allied to the Röntgen rays, and, like these, were difficult to grasp experimentally, and were completely unexplained as regarded their nature. The alpha and beta rays were more deeply investigated; they consisted of swarms of electrically laden projectiles that were hurled out of the combination of atoms, in which the alpha rays took on a positive and the beta rays a negative electrical charge. On account of the very remarkable changes the products of the rays underwent, the study of them must lead to entirely new chemical views, and to a revolution of our views of the chemical elements.

Professor Dr. Brill, Vienna, said to the 82 known elements investigations into radio-active material had added 29 more, the study of which had been made difficult by the fact that only small traces of the material were procurable.

Geh.-Rat Professor Heubner, Berlin, addressed the meeting on the subject,

#### GRAVE DIGESTIVE INSUFFICIENCY IN THE CHILD.

He described a chronic morbid condition of the digestive organs lasting for months and years recognisable in this: that the digestive power of the child that previously benefited by its food in the usual way suddenly or gradually gave way, and the child passed into a condition of weakness, and could no longer digest even the lightest foods. This condition brought about the most extreme advancing emaciation, debility, and falling-off; it might even bring about a fatal result. The disease was not traceable to the ordinary gastro-intestinal affections. It affected well-situated children in the second and third years of life, children who were not neglected or who had no medical supervision during infancy, and who were in good condition, with normal weight, had good muscular power, were able to stand and walk, had good teeth, mostly after long-continued natural nourishment, and who sometimes had entered their second year after successful artificial feeding. It was common to all cases that cows' milk formed the principal part of the nourishment given. Under such apparently rational diet, and watched over with solicitude, the child suddenly ceased to thrive, and might remain at the same weight for months. Growth in height, also, and every other advance ceased in spite of every modification of the milk diet. The internal organs of such children showed no changes beyond a good deal of distension of the abdomen. The evacuations pointed to mischief from a milk diet. Slightly coloured, grey, and yellowish-grey, dry, firm masses of foul odour alkaline reaction often mixed with mucus, with lime soaps as the chief constituent. The condition could only be improved by leaving off the milk or reducing it to from 100 to 150 gm. a day. Cocoa, infants' prepared flour, oatmeal, biscuit, cakes, should be substituted; for dinner mid-day there should be a carefully prepared meal of meat, finely minced, vegetables and potatoes, selected with caution. In a second category of such children with weak digestions, such a change of diet will only have a favourable result for a short time, but will end in catastrophe—fever, diarrhoea, rapid fall in weight, in a few days. The danger is noticeable a few days beforehand in the character of the evacuations, which are characteristic of dyspepsia, with fermentation—copious soft evacuations, not liquid, full of gas bubbles, generally brown masses, with a sour smell and acid reaction. They show that the digestive cells are not yet capable of digesting the carbohydrate constituents of the food. In the severest cases this takes place also in regard to the sugar of mothers' milk when the attempt is made to increase the quantity of it so far as to meet the requirements of energy. There is, then, scarcely any hope of a favourable outcome. Nothing more than the albuminous constituent of the food is digested. But, with

albumen alone, nutrition is not possible. This will indeed form an important part of the day's nourishment in the shape of egg water, meat juice, caseine, carefully scraped or finely-minced roast meat; then mother's milk should be given, from which, in the speaker's opinion, the cream should be taken at first. You do more by degrees, add asses' milk where it can be done, and then, with the greatest caution, begin again tentatively with amylaceous food in the form of toasted bread. But in all these cases serious unexpected relapses and a struggle of months must be looked forward to. The essence of these rare but very remarkable affections lies, in the opinion of the speaker, in an imperfectly developed condition of the whole of the digestive apparatus, in which the functions became easily exhausted with a long-continued quantitative sameness of food.

PROF. BRAUN'S LOTION FOR SORENESS AND IRRITATION OF THE EYES.

Zinc sulph., g. iv.

Acidi borici, ʒj.

Aq. rosæ ad., ʒiv.

M. ft. Lotion.

Signe "The Lotion."

To be applied with lint with an equal part of hot water frequently during the day.

It also forms an excellent nasal spray for use during any stage of a "cold in the head."

### AUSTRIA.

Vienna, Oct. 17th, 1909.

#### CHOLECYSTITIS.

KNINA gave the history of a few cases operated on in Hochenegg's Klinik for cholecystitis resulting from influenza. According to the experiments of Mieczkowski, the gall-bladder in the human subject is always sterile, and only under pathological circumstances are micro-organisms to be found in that organ. The first and most likely infection would be the bacteria coli, typhosus, paratyphosus, and the streptococcus, but it should be more rare to meet with the staphylococcus pyogenes aureus, the diplococcus pneumoniae of Friedländer, the bacillus pyocyaneus, and the influenza bacillus; even the anaerobic gas bacillus of Laubheimer has been found in the organ.

Prior to 1903 no influenza bacilli had been proved, but in that year Heyrovsky demonstrated its presence in a female patient who had suffered from pneumonia in 1895, and who was suddenly taken ill in 1903 with fever, pain, vomiting, the pain locating itself in the region of the liver and radiating to the groin. A week later icterus increasing gradually with light coloured stools. A short interval of improvement set in, but a relapse of pain and a temperature of 40° Cent. decided the treatment in favour of an operation.

The gall-bladder was opened and 41 calculi removed, but in the course of a few days bronchitis set in, followed by pneumonia. The gall-stones were found mixed with blood and pus which contained the influenza bacilli.

Laubheimer shortly afterwards confirmed this discovery by recording two influenza cholecystites, which commenced with empyema of the gall-bladder, fever, vomiting, and pain in the right side. In the first case no previous history of an influenza attack was to be found in the clinical history. After opening the gall-bladder a bloody purulent fluid was discharged, and one calculus removed, but no offensive smell was observed.

In the second case a female who had complained of the symptoms of stone for 30 years, but two weeks before the real symptoms of cholecystitis she had influenza. Two years later she was operated on and a large stone with pus was removed, the latter containing the influenza bacilli. Both these cases appear to have been infected during an epidemic of influenza.

It is well known that icterus is very common in infectious diseases, and therefore no exception in influenza. We have, therefore, to accept the theory of swallowing the bacilli when they pass the stomach, enter the duodenum, and then pass along the ductus choledochus, and finally reach the gall-bladder. This

is the manner in which other bacilli such as the coli and typhoid reach the organ, and it is presumed the influenza passes thither by the organism being swallowed.

In Hochenegg's Klinik we have interesting cases recorded, but one briefly stated might suffice as an example. A woman, æt. 55, was received on June 28th, 1907. Fifteen years before this she suffered from vomiting after every meal. Five years before admission she observed a swelling at the margin of the ribs on the right side, with pain on pressure, vomiting, etc., till April, 1907, when she was awakened during the night with great pain over the hepatic region, but no icterus was present.

On July 3rd a pararectal cut 15 centimetres long was made at the margin of the ribs over the pear-shaped swelling, the gall-bladder opened and three stones were removed with pus. Gauze dressing and drainage was provided, but 22 days after the operation the temperature suddenly rose to 39.7 Cent., and fell as suddenly the following day.

The bacterial examination with Gram staining gave polynuclear leucocytes with a large number of non-coloured fine rods. These were partially extra-cellular and intra-cellular. No other organisms could be found, this led to the diagnosis of influenza bacilli. The agar plates were sterile, while the blood media gave large colonies of influenza bacilli. Further experiments revealed a sort of symbiosis as Heyrovsky had met with in his examinations in different media. All the anaerobic cultures were sterile.

Owing to this alternation in different media it is often difficult to diagnose the bacilli when foreign media are not at hand, but the long continuance of the discharge is a good diagnostic sign of the influenza infection. Further examination of the fluids in cholelithiasis after influenza attacks are necessary before we can determine the incidence of the disease.

#### DIABETIC THERAPY.

Noorden, in his clinical lecture on the subject, thinks systematic treatment from the very first symptom will often avert the disease or greatly modify the future progress. In the malignant form, he recognises the impotence of any form of treatment, but in the milder forms beneficial results can often be obtained by a steady perseverance in a regulated diet. As a rule, diabetes commences with transitory attacks appearing quite suddenly as a harmless alimentary or neurogenic glycosuria, rapidly terminating in progressive diabetes.

## FROM OUR SPECIAL CORRESPONDENTS AT HOME.

### EDINBURGH.

THE LATE SIR ARTHUR MITCHELL, K.C.B.—Sir Arthur Mitchell, so well-known for his pioneer work in connection with lunacy, died on October 12th, in Edinburgh. He was in his 84th year, having been born in 1826, and was the son of Mr. George Mitchell, C.E. He was educated at Aberdeen University, and afterwards studied in Paris, Berlin, and Vienna. On the passing of the Lunacy Act of 1857, he was appointed a Deputy Commissioner, and in 1870 he became a Commissioner. From his long connection with the Lunacy Board, Sir Arthur Mitchell has probably influenced lunacy administration in Scotland more than any other person, and he may be said to have been the creator of the feature of the Scottish system which is specially distinctive—the care of the insane in private dwellings, a subject on which he wrote a book in 1864. In all Sir Arthur's work he kept in view mainly the comfort and happiness of the insane, but never forgot the economic aspects of the problem. He had in an eminent degree the faculty of going to the heart of a question, and his knowledge of men and forceful, courteous personality enabled him to secure the adoption of his views even when those views were not at first welcome. His relations with all officials under him were most cordial, and his character was such that his advice and assistance were frequently sought by public and private individuals. In 1880 Sir Arthur Mitchell served on



a Commission on Criminal Lunacy, and in 1885 on a Departmental Committee on Criminal Lunatics in Ireland, and in 1889 he became a member of a Commission to inquire into the whole lunacy administration of Ireland. In recognition of the worth of his public service he received a C.B. from Mr. Gladstone in 1886, and was raised to the Order of K.C.B. by Lord Salisbury in 1887. Sir Arthur Mitchell was scarcely less famous as an antiquarian than in his own profession. For half a century he was intimately associated with the work of the Society of Antiquaries of Scotland, and during his travels as Deputy Commissioner he amassed a great quantity of notes and observations on superstitions, folk-lore, peasant customs and the like. He was the first Rhind Lecturer on Archæology, and delivered three courses of lectures, entitled "The Past in the Present: What is Civilisation?" Among academic and other honours conferred on him may be mentioned the degree of LL.D. (Aberdeen), Hon. Fellow Royal College of Physicians, Ireland, Professor of Ancient History to the Royal Scottish Academy, and H.R.S.A., Hon. Sec. Meteorological Society, Morison Lecturer in 1867-71.

**NEW LABORATORIES AT THE ROYAL BOTANICAL GARDENS, EDINBURGH.**—Owing to the increased number of students of botany in the University, it has been found necessary to plan new laboratories in connection with the class-room. The premises will contain a class-room, a water culture room, two photographic dark rooms, a dark culture room, a workshop, and a room for pathology. On the floor above there will be the mycological laboratory, the photo-micrography room, the studio, and the rooms for research work, culture, sterilisers and incubators. The plans have been prepared in, and the erection of the building is being supervised by H.M. Board of Works.

### GLASGOW.

**COMPULSORY NOTIFICATION OF PHTHISIS.**—This question was brought before the Glasgow Town Council on October 14th by a deputation consisting of representatives of 14 ward committees, 28 friendly societies, 27 trades unions, 5 co-operative societies, and the Trades Council. The spokesman of the deputation asked for compulsory notification for a term of, say, three years, the institution of district dispensaries, along with the home visitation by nurses under the supervision of an assistant doctor. They thought there should also be provision in the hospitals for advanced phthisis. The speaker hoped that the Corporation would not put the matter on a financial basis. A large amount of money was being lost to Glasgow year by year through the prevalence of this scourge, and on an actuarial basis it had been calculated that the premature deaths represented a loss of as much as a million sterling annually. At a later stage, after the deputation had withdrawn, the minutes containing recommendations by the Health Committee on the above lines were approved, so that the scheme will now be set on foot.

**SUDDEN DEATH OF DR. T. S. MEIGHAN.**—By the sudden death of Dr. Thomas Spence Meighan in a nursing home in Glasgow, on the 15th inst., the profession in Glasgow has lost one of its most distinguished surgeons. Two years ago he was appointed Senior Surgeon to the Glasgow Eye Infirmary, an institution with which he had been associated for nearly forty years. On Friday last he attended the Eye Infirmary apparently in his usual health, and was found lying unconscious in the street in the immediate neighbourhood of the hospital, from whence he was conveyed to a nursing home, and died a few hours afterwards, never having regained consciousness. We hope to give a few notes of his career in our next issue.

**THE NEW OCCUPANT OF THE CHAIR OF ANATOMY** in the University of Glasgow, Dr. Thomas Bryce, has been cordially welcomed and received both by the Senate and the students. Dr. Bryce for the last fifteen years has been seriously cultivating anatomy, chiefly at St. Margaret's College, Glasgow, where, by his researches, he has earned great distinction in the

subject of embryology. The last edition of "Quain's Anatomy" is in part the work of Dr. Bryce. His predecessor, Dr. John Cleland, has recently retired after over 30 years' service in the University.

### BELFAST.

**X-RAYS FOR COUNTY INFIRMARIES.**—A nice question has arisen in Omagh, at the Committee of Management of the County Infirmary. The Surgeon, Dr. E. C. Thompson, has applied for an X-ray outfit, and says it is absolutely essential for the interests of the institution. During a discussion on the subject, the opinion was expressed that the County Council would not give a grant for the purpose, and that the funds necessary would have to be raised by public subscription. Some subscriptions were immediately offered, and finally the matter was adjourned till next meeting, when Dr. Thompson is to present a full statement with regard to cost, etc. The question that has arisen, as to how far such an outfit is necessary in the smaller provincial hospitals, is really one of considerable importance, and an article on it by an expert would be very helpful. In most country towns it will probably be found that the chief difficulty is not to provide the outfit, but to find a man to work it. It is no doubt interesting to experiment with it as a new toy, but to work it regularly for years, when the novelty wears off, is a troublesome and monotonous task, which few men are willing to undertake. Yet unless it is properly worked by a man who takes the trouble to learn something about it, it is not only useless, but an actual source of danger.

**THE MEDICAL SESSION.**—The winter session has opened at the Belfast medical school, and the classes promise to be well filled. Entries at the University are still in progress, so it is not yet possible to give the numbers. Lectures in the medical faculty began last week, and on Thursday, 14th, the Royal Victoria Hospital started work, an address being given by Mr. Henry Hanna, Assistant Ophthalmic Surgeon.

**LADY DUFFERIN AND DISTRICT NURSING.**—The dowager Marchioness of Dufferin and Ava presided at the annual meeting of the Bangor (Co. Down) District Nursing Society last week, and gave a most interesting address on the work of the Society. She spoke with authority on the subject, as her daughter, Lady Hermione Blackwood, has acted as honorary nurse to the Society for some years. Lady Dufferin expressed the opinion that in no way could the poor be better helped than by providing nurses for them in sickness. After the address, Dr. Marion Andrews gave an interesting account of the efforts that are being made in England and abroad to promote the health of school-children. She referred at length to the importance of the district nurse as a preventer of disease, by stopping the spread of infection through ignorance. Attention was needed both in and out of school, and one of the most urgent needs of Belfast, from a health point of view, was proper school accommodation. In one school she had found infants of 3 and 4 years kept at their desks from 9.30 till 1 without a single run to freshen them, and in the half-hour interval after that they simply played in the street. Medical inspection of school-children, as introduced in England, would do untold good.

### LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

#### THE DECLINING BIRTH-RATE.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—This subject is of tremendous importance to the statesman, the physician, and the sociologist. I am glad you seem disposed to keep your columns open to its discussion. The subject cannot be freely and fully debated except in a medical journal. The French have pushed the idea of limitation of the family to the egoistical, logical conclusion, and every serious writer on the subject takes into account the

object lesson which they present. A correspondent last week very appropriately quoted Toynbee, and I have cited two leading Frenchmen, and could cite fifty more in support of the same views. Unfortunately the lay Press has become hypnotised by the *entente cordiale*, and criticism of our neighbours has become silenced. The *entente* had, however, its start in the fact that France recognised that without allies she would be at the mercy of Germany; whilst England and the whole of Europe, except Austria, which is bound by hoops of steel to Germany, sees clearly that they cannot allow Germany to dominate the Continent more completely and with greater force than it was dominated by the great Napoleon. Europe would be obliged to support France against Germany, if she were far more rotten than she has yet become. I said in a previous letter that the signs of the moral decay of the French were unquestionable. It is interesting to read in *The Times* a report of Dr. A. Shadwell's speech on this subject at the Church Congress on Wednesday. If you will allow me now to summarise this speech I may return to the subject in future letters. Many points call for discussion, among them the question of the effects upon the organs of generation and the nervous system of women, who systematically prevent conception by artificial means, needs examination. Dr. Shadwell spoke to the following effect:—"He had recently spent some months studying conditions all over France. The country was saturated with the Materialism and moral irresponsibility taught by Socialism, and one result was a veritable anti-Christian persecution. Did they know that in France to-day public officials with anything to lose dared not be seen going to church with their wives and children? Sometimes even their wives dared not go. They were spied on and reported. The jurors in the Department of the Yonne had recently petitioned the Government to have the word 'God' removed from the oath on the ground that it offended their conscience, because they did not believe in the existence of God. The worship of Mammon was supreme. There was no respect for anything whatever but the appearance of wealth. He had made that observation to many Frenchmen and Englishmen long resident in France, and they all admitted its truth. We had not got so far, but we were on the road." The bulk of the French have cast aside religion, and have found nothing to put in its place. They have adopted the view of their cynical writer, who asked: What has posterity done for us? Their motto is: Let us eat and drink for to-morrow we die; and they are making this idea a concrete fact from the national point of view by the adoption of the pernicious practice, which the British race now unfortunately seems determined to imitate.

I am, Sir, yours truly,

A STUDENT OF SOCIOLOGY.

October 9th, 1909.

## OBITUARY.

SIR ARTHUR MITCHELL, K.C.B., LL.D., UNIV. EDIN.

We regret to announce the death of Sir Arthur Mitchell, at his residence in Edinburgh, at the age of 83. The son of Mr. George Mitchell, C.E., he was born in 1826, and received his early education at Elgin, and afterwards at Aberdeen University, whence he proceeded to Paris, Berlin and Vienna. At the passage of the Lunacy Act of 1857 he was appointed Deputy Commissioner, and in 1870 he was made a Commissioner. From 1867 to 1871 he was Morison Lecturer on Mental Diseases to the Royal College of Physicians of Edinburgh, and he was a member of the Commission on Criminal Lunacy in 1880-81, and Chairman of the Commission on Lunacy Administration from 1888 to 1891. During this long period he was engaged in many legal cases involving questions of insanity, and by his character and intellectual force he did more than any other man towards shaping the lunacy administration of Scotland in its present form. Sir Arthur was a man of wide acquirements outside

medicine. He was a prominent member of the Society of Antiquaries of Scotland, and Rhind Lecturer in Archæology from 1876 to 1878, founded on which was his well-known work, "The Past and the Present: What is Civilisation?" In 1901 he wrote a valuable history of the preceding fifty years' work of the Society. He was also Professor of Ancient History to the Royal Scottish Academy from 1878, a member of the Universities (Scotland) Commission, which sat from 1890 to 1897, and President of the Scottish Meteorological Society. The University of Edinburgh conferred on him the honorary degree of LL.D. in 1884, and three years later he was created K.C.B.

From the above short and imperfect record it will be seen that Sir Arthur Mitchell's life was one of extraordinary activity and breadth of intellectual outlook. A keen observer of men and things, he brought to bear on all matters he undertook the energies of a powerful and highly-trained mind.

Sir Arthur Mitchell's wife, a daughter of the late Mr. James Houston, of Strathspey, died a few years ago. He leaves one son, Mr. Sydney Mitchell, the architect. One of his nephews is Dr. George Ogilvie.

## SPECIAL ARTICLES.

### LUNACY IN IRELAND.

THE Annual Report of the Inspectors of Lunatics in Ireland (a) shows that the total number of lunatics under care on the 1st January, 1908, was 23,931, a number which showed an increase during the year of 213. The increase for the previous year was 164. The average increase for the preceding ten years was, however, much greater—413. We are glad to note that the number of insane in workhouses continues to show a steady decrease.

The proportion of insane under care to the total population has increased even more than the actual numbers of insane, as the population has for many years, until the present, shown a steady decline. The proportion has more than doubled in thirty years. In 1880 there were 250 insane under care in every 100,000 of the population, whereas at present there are 547 in every 100,000. The rate of increase for the past three years has been 5 per annum, whereas the average rate during the entire period was over 10 per annum.

The admissions during the year amounted to 3,798; the discharges were 1,848, the escapes 6, and the deaths 1,417. Of the 1,848 discharged 1,401 were regarded as having recovered. In only 235 cases was the cause of death verified by autopsy. Of the 1,417 deaths 372, or 26.3 per cent., were due to phthisis. The highest rates for phthisis were: in Clonmel (50), Killarney (41.2), Ballinasloe (35.1), Ennis (34.4), and Cork (34). The conditions in some of these asylums seem to call for careful inquiry. The lowest rates were in Carlow (3.1), Armagh (9.7), Letterkenny (10.5), and Waterford (12.5). The means by which such excellent results have been obtained might well be applied elsewhere.

In the year 1908 there were 4 deaths by misadventure, 5 by suicide, and 1 from injuries inflicted by a fellow-patient. One of the cases of suicide was curious. In Ennis Asylum a patient was put to sleep in a padded room under the restraint of a strait jacket. He succeeded in removing the restraint jacket, and flattening with his teeth the round metal tag of the lace which fastened it, he used the tag for making an incision in his abdomen by cutting the skin and subcutaneous tissue, afterwards enlarging the wound thus made with his fingers, and in this way reached the intestines, and tore out some coils, 16 feet in length, severing them completely from the body.

There were several outbreaks of typhoid fever in district asylums during the year. In Ballinasloe Asylum seventeen cases occurred, in Ennis seven, and in Mullingar seven. Forty-nine cases of dysentery occurred in the Richmond and Portrane Asylums.

(a) "Lunacy in Ireland." The Fifty-eighth Annual Report (with appendices) of the Inspectors of Lunatics (Ireland) for the year ending December 31st, 1908. Dublin: H.M. Stationery Office. 1909. (Bd. 4,760.) Price 11d.

Waterford Asylum had the honour of showing the lowest death-rate—4.1 per cent. of the average number resident.

As regards expenditure, the highest net average cost per patient was in Sligo, £26 17s. 11d., and the lowest in Castlebar, £18 4s.

The Inspectors note with pleasure the tendency to increase the amount of land attached to the various asylums, and they urge the importance of engaging patients in farm and other work. "Not only," they remark, "do large farms attached to asylums afford means of healthy labour in the open air, and an outlet for that restlessness and desire of motion so common amongst the insane, thus producing quietude and peace where formerly there was noise and excitement, but the interest aroused in agricultural work also brings back the wandering mind to sane views, and so helps to promote recovery. Moreover, large tracts of land attached to asylums enable the patients, both male and female, to take extended and varied walks, and to enjoy the open air without encroaching on the public thoroughfares—a course which often gives rise to complaints by the sane community."

As evidence of the humanity shown by the asylum staffs generally, it is satisfactory to find that in only two cases were prosecutions of attendants deemed necessary during the year.

## MILITARY & NAVAL MEDICAL NOTES.

**HEALTH IN THE FRENCH ARMY.**—The sickness in the French Army has, according to statistics, been greater lately, and has been put down by the military authorities to the fact that men in indifferent health at the time of enlistment were put to active work, rather than that insanitary conditions were factors in the causation of increased ill-health. But, before giving our opinion as to the share each or both have, we should require to read the sanitary report. The average of 269 per 1,000 sick is very high, and it merely accounts for men admitted into military hospitals. Sick treated in quarters are not included. These would bring up the numbers to 134,631, and their time under treatment is given as 3,101,126 days. Algeria and Tunis gave 25,126 hospital admissions, or a proportion of 360 per 1,000 of strength higher than in previous years. Their treatment totalled 648,601 days.

**THE PHYSIQUE OF THE GERMAN AND BRITISH SOLDIER.**—A writer to a military weekly, commenting on the recent German manoeuvres, says, of the physique of the German soldier of two years' service and that of the British soldier of similar service on the peace establishment, that "the odds are rather in favour of the German at present."

## REVIEWS OF BOOKS.

### PRACTICAL MICROSCOPY: AN INTRODUCTION TO MICROSCOPICAL METHODS. (a)

COMPARATIVELY few medical men know anything much about the microscope. They understand how to illuminate the object and how to use the coarse and fine adjustments, and here their knowledge ends. To those who wish to get the best work out of their instrument we heartily commend this book. It will also be of very great assistance to those who propose to buy a microscope, as the author gives his experience of the various makes of stands and objectives. Dr. Shillington Scales is so well-known as a famous microscopist that it is superfluous to point out his qualifications for dealing with the subject. In the present edition such subjects as photography with ultra-violet light and apparatus for examining ultra-microscopic

particles are fully dealt with. Microscopical technique and section cutting are so dealt with that the comparatively inexperienced worker for whom the book is mainly written will be assisted as much as possible. The considerable enlargement of the book and its extended scope we think fully warrant the change in title from "Elementary Microscopy."

### OPERATIONS ON THE EAR. (a)

ESSENTIALLY a German work, based upon the author's experience in Luede's clinic, this book describes and recommends those operations concerned with middle-ear suppuration which are practised there. Naturally, therefore, all the authorities quoted are German, with the sole exceptions of Wilde and McEwen. The translation has been excellently done by Dr. Murphy, and to English practitioners who worship German surgery and are inclined to depreciate the good work done in their own country, this work will prove an attraction.

As regards paracentesis of the drum, the opinions of Zaufal and Piffi that middle-ear inflammations run a cyclic course, and that consequently paracentesis should be avoided, are rightly objected to by Heine. Two matters surprise us: that a horizontal incision is advocated, and the use of a mirror held by the teeth advised. Nor can we agree that the snare which Heine prefers for the removal of aural polypi is nowadays "universally employed."

We were especially interested in the author's remarks regarding ossiculectomy, an operation in the value of which he states that he has of late years lost faith. Our own opinion upon the matter is that indiscriminate removal of ossicles is to be deprecated, but that, in picked cases, and combined with ablation of the outer attic wall, it is often of considerable value.

Mastoid operations are dealt with in Chapters II., III., and IV., but we would point out that the great superiority of the gouge over the mallet and chisel, which is owed entirely to English otology, is passed over in absolute silence. The discussion on p. 86, too, might have been obviated by reference to the work of another English surgeon, Jones, of Liverpool. We fully approve of Heine's disagreement with the grafting operation, and it is interesting to note that the work of Ballance (entirely German in its origin) in connection with this method is wholly ignored, a fate which, less merited, is also meted out to British work on labyrinthine suppuration.

Part II., devoted to intra-cranial complications, is adequate, and calls for no special mention.

### DIATHESIS AND OCULAR DISEASES. (b)

THIS volume comprises, the author tells us, his post-graduate lectures delivered at the Glasgow Ophthalmic Institution in September, 1908. As a record of personal clinical experience these lectures are both interesting and useful, and especially so on account of the wide range of subjects which they include. After discussing the various diatheses, such as the neurotic, the rheumatic, and gouty, the author passes in review the ocular inflammations, which mainly apply to these conditions. Thus we have chapters upon inflammation of the conjunctiva and of the sclerotic, of the uveal tract, of the retina and optic nerve; also toxic amblyopia and retro-ocular neuritis, concluding with an excellent chapter upon glaucoma. Many details of treatment are given in the description of these various diseases, based upon the author's own experience; indeed, the practical, useful advice with which the volume abounds renders it well worthy of perusal by practitioners, to whom its pages especially appeal. The text, moreover, is illustrated by seventeen plates, representing various forms of ocular disease. The volume is of handy size, and we can cordially recommend it.

(a) "Operations on the Ear: The Operations for Suppurative Otitis Media and its Intracranial Complications." By B. Heine. Translated by W. L. Murphy, M.A., M.B. Cantab., B.O., F.R.C.S.I., Surgeon to the Throat and Nose Department, St. Vincent's Hospital. Pp. 218, with 56 illustrations. London: Baillière, Tindall and Cox. 1909. Price 5s. 6d.

(b) "Diathesis and Ocular Diseases." By A. Maitland Ramsay, M.D. Lond. Pp. 192, with 17 plates. London: Baillière, Tindall and Cox, 1909. Price 3s. 6d.

(a) "Practical Microscopy: An Introduction to Microscopical Methods." By F. Shillington Scales, M.A., B.C. Cantab., Fellow of, and Curator to, the Royal Microscopical Society; Hon. Medical Officer in charge of Electrical Department at Addenbroke's Hospital, Cambridge. Second Edition. Pp. 334 and xvi, with 122 illustrations. London: Baillière, Tindall and Cox. 1909.

## NEW BOOKS AND NEW EDITIONS.

THE following have been received for review since the publication of our last monthly list:—

EDWARD ARNOLD (London).

A System of Clinical Medicine. By Thomas Dixon Savill, M.D.Lond. Second edition, revised by the Author, assisted by Frederick S. Langmead, M.D.Lond., and Agnes F. Savill, M.A., M.D. Illustrated. Pp. 963. Price 25s. net.  
Elementary Physiology for Teachers and Others. By W. B. Drummond, M.B., C.M., F.R.C.P.Edin. Illustrated. Pp. 198. Price 2s. 6d.

HAILLIERE, TINDALL AND COX (London).

The Open-Air or Sanatorium Treatment of Pulmonary Tuberculosis. By F. Rufenacht Walters, M.D., B.S.Lond., M.R.C.P., F.R.C.S. Pp. 323. Price 5s. net.

Practical Microscopy. An Introduction to Microscopical Methods. By F. Shillington Scates, M.A., B.C.Cantab. Second Edition. Illustrated. Pp. 334. Price 5s. net.

The Morphia Habit and its Voluntary Renunciation. By Oscar Jennings, M.D., Paris. Pp. 492. Price 7s. 6d. net.

Age Incidence, Sex, and Comparative Frequency in Disease. By James Grant Andrew, M.B., B.Ch., F.F.P. and S.Glasg. Pp. 439. Price 10s. 6d. net.

JOHN BALE, SONS, AND DANIELSSON, LTD. (London).

Jejunal and Gastro-jejunal Ulcer, following Gastro-jejunostomy. By Herbert J. Paterson, M.A., M.B., etc. Pp. 72.

CASSELL AND CO., LTD. (London).

Diseases of the Stomach. By S. H. Habershon, M.A., M.D., F.R.C.P. Illustrated. Pp. 565. Price 9s. net.

J. AND A. CHURCHILL (London).

Sight Testing Made Easy. By W. Wright Hardwicke, M.D., M.R.C.P. Pp. 66. Price 2s. 6d. net.

ARCHBOLD CONSTABLE AND CO., LTD. (London).

Studies in Tuberculosis. By Henry Clarke, M.A., M.D.Cantab. Pp. 59. Price 5s. net.

CORNISH BROS., LTD. (Birmingham).

Contributions to the Study of Rectal Diseases. By Victor Milward, B.A., M.B., etc. Pp. 92. Price 2s. net.

FROWDE, HENRY, AND HODDER AND STOUGHTON (London).

Text-book of Anatomy. Edited by D. J. Cunningham, F.R.S., M.D.Edin. et Dubl., D.Sc., LL.D.Glasg. et St. And., D.C.L.Oxon. Third Edition. Pp. 1,427. Price 31s. 6d. net.

A System of Operative Surgery. By various Authors. Edited by F. F. Burghard, M.S.Lond., F.R.C.S.Eng. In four volumes. Vol. II. Pp. 720. Price 36s. net.

Infectious Diseases. A Practical Text-Book. By Claude Buchanan Ker, M.D.Ed., F.R.C.P.Ed. Pp. 555. Price 20s. net.

Introduction to Practical Chemistry for Medical, Dental, and General Students. By A. M. Kellas, B.Sc.Lond., Ph.D. Heldb. Pp. 262. Price 3s. 6d. net.

Gall-Stones: Their Complications and Treatment. By A. W. Mayo Robson, D.Sc., F.R.C.S., and F. J. Cammidge, M.D. Pp. 315. Price 5s. net.

GALE AND POLDEN, LIMITED (London and Portsmouth).

Gale and Polden's Military Series. Guide to Promotion for Non-Commissioned Officers (Corporal to Staff Sergeant) and Men of the Royal Army Medical Corps. With Appendix on Hints for Young N.C.O.'s on Clerical and Other Duties in a Military Hospital. Compiled by Captain S. T. Beggs, M.B., Royal Army Medical Corps (Reserve of Officers). Second Edition. Price 3s. 6d. net.

H. K. LEWIS (London).

The Theory and Practice of Medicine. By Frederick T. Roberts, M.D., B.Sc., F.R.C.P. Tenth Edition, with Appendix, 1909. Pp. 1,410. Price 12s. 6d. net.

Medical Morbid Anatomy and Pathology. By Hugh Thursfield, M.D., F.R.C.P., and William P. S. Branson, M.D., M.R.C.P. Pp. 262. Price 6s. net.

LONGMANS, GREEN AND CO. (London).

Outlines of Bacteriology (Technical and Agricultural). By David Ellis, Ph.D., D.Sc., F.R.S.E. Pp. 263. Price 7s. 6d. net.  
The Vegetable Proteins. By Thos. B. Osborne, Ph.D. Price 3s. 6d. net.

Anatomy: Descriptive and Applied. By Henry Gray, F.R.S. 17th Edition, revised and edited by Robert Howden, M.B., C.M., Professor of Anatomy in the University of Durham. With 1,032 illustrations. Price 32s. net.

Recent Advances in Physical and Inorganic Chemistry. By A. W. Stewart, D.Sc., with an Introduction by Sir William Ramsay, K.C.B., F.R.S. Pp. 267. Price 7s. 6d. net.

Quain's Elements of Anatomy. Edited by E. A. Schäfer, LL.D., Sc.D., F.R.S., J. Symington, M.D., F.R.S., and T. H. Bryce, M.A., M.D. In four volumes. Vol. III, "Neurology," by E. A. Schäfer and J. Symington. Part II. Eleventh Edition. Illustrated. Pp. 384. Price 15s. net.

The Family and the Nation. By William Cecil Lampier Whetham, M.A., F.R.S., and Catherine Dunning Whetham, his Wife. Pp. 233. Price 7s. 6d. net.

E. AND S. LIVINGSTONE (Edinburgh).

Deuteronomy Smith. New Edition. Illustrated. Pp. 68. Price 1s. net.

Arsenic Gas Poisoning. By John Glalisher, M.D., D.P.H. Price 5s. net.

Chemistry. Part II. Inorganic and Organic. Pp. 73. Price 1s. net.

MACMILLAN AND CO., LTD. (London).

A System of Medicine. By Many Writers. Edited by Sir Clifford Allbutt, K.C.B., etc., etc., and Humphry Davy Rolleston, M.A., M.D., etc. Vol. VI. Diseases of the Heart and Blood-Vessels. Pp. 861. Price 25s. net.

G. STEINHEIL (Paris).

Leucopathies Metastases. Par Le Dr. Emile Feuille. Pp. 195.

JOHN WRIGHT AND SONS, LTD. (Bristol).

Dictionary of Ophthalmic Terms, with Supplement. By Edward Magennis, M.D., D.P.H. Pp. 67. Price 2s. 6d. net.

## LABORATORY NOTES.

## "AKOLL" BISCUITS.

THE repugnance often evinced by patients to foods free from carbohydrates is well-known to every practitioner, who finds considerable difficulty in selecting nutriment that will appeal to the palate without impeding his treatment. To such we would strongly recommend a trial of these "Akoll" biscuits. The name is very appropriate, as we find them to contain only a very slight trace of starch, and we have not found any sugar to be present.

Our analysis shows the biscuits to contain:—

Moisture	...	...	4.24 per cent.
Proteins	...	...	57.17 "
Mineral matter	...	...	3.98 "

Most of the remaining constituents are fats, so that these biscuits can be termed "highly nutritious" with all truthfulness. No less than seven different proteins are said to be embodied in these biscuits, and they are recommended not only for cases where starch and sugar must be avoided, but also for invalids and for aggravated cases of corpulency.

The palatability of such preparations is largely a matter of opinion, but we think that most patients would eat "Akoll" biscuits with satisfaction.

## MEDICAL NEWS IN BRIEF.

## Royal College of Surgeons of Ireland.

THE Winter Session opened on Friday last with an address by the President, Mr. Lentaigne, when the following medals and prizes were distributed:—Barker Anatomical Prize—£26 5s., H. R. Tighe; special prize, £21, J. S. Pegum. Carmichael Scholarship—£15, J. T. Duncan. Gold Medal in Operative Surgery—Miss I. M. Clarke; silver medal, F. N. Harvey. Stoney Memorial Gold Medal in Anatomy—J. T. Duncan. Various minor prizes in Anatomy, Medicine, Surgery, Midwifery, Physiology, Pathology, and Chemistry were also distributed, there being about 200 students present at the ceremony.

## St. Vincent's Hospital, Dublin.

AT the annual meeting at St. Vincent's Hospital, introductory to the work of the Winter Session, Dr. Andrew Horne, President of the Royal College of Physicians, occupied the Chair.

Mr. P. J. Fagan, Surgeon to the Hospital, delivered the inaugural address. He began by declaring open the new operating theatre which has been built in the hospital, and which is a good example of such buildings. After some references to ancient and modern methods of teaching the student, and to the teaching of the modern nurse, Mr. Fagan went on to refer to the anti-tuberculosis movement in Ireland, a movement which he considered as too prone to advertise the faults rather than the good points of the country. A vote of thanks was moved to the lecturer for his address by the Most Rev. Dr. Donnelly, seconded by Dr. Cox, the latter of whom expressed disagreement with his views on the tuberculosis question. Finally a vote of thanks was proposed to the Chairman by Dr. McWeeney. The audience then inspected the new theatre, and the meeting terminated.

## Cardiff Medical School.

THE Treasury has allocated £1,500 a year to the Cardiff School of Medicine. In spite of Sir Donald MacAlister's note upon the Faculty of Medicine in the University College, Cardiff, published in the recent report of the committee on the University of Wales and the Welsh University Colleges, few imagined that the committee would second his praise in such a practical manner. The Cardiff Medical School was started less than twenty years ago, chiefly through the enterprise and energy of Dr. Edwards, of Cardiff.

By founding two chairs, one of anatomy and the other of physiology, and by the foundation of a lectureship of *matra medica*, all of which were attached to the Cardiff and Monmouthshire University College, in which institution chemistry, physics, botany and zoology were already taught, students of medicine were enabled to spend at least three out of their five years at Cardiff. The University of Wales has appointed a medical board whose chief work has been the drawing up of regulations for the Welsh M.B., B.Ch., under the able guidance of Sir Isambard Owen. The Cardiff Infirmary has been advancing by leaps and bounds. It has an excellent staff of surgeons and physicians, and is in most respects up to date; and in two years' time, when its new wing is built, it will be fitted to accommodate students who wish to spend all their five years of study in Cardiff. Cardiff possesses also a fever hospital, and an asylum within a tram drive of the infirmary.

#### Leeds Medical School.

THE following is a list of the prizes presented on October 2nd, 1909:—

Anatomy, Junior.—G. P. Mellis, prize; J. C. Metcalfe, certificate. Anatomy, Senior.—W. Robinson, prize; F. Wigglesworth, certificate. Physiology.—G. P. Mellis, prize; J. C. Metcalfe, certificate. Physiology, Practical.—W. Robinson, prize; J. B. Sinson, certificate. *Materia Medica*.—J. C. Metcalfe, prize; G. P. Mellis, certificate. Silver Medal.—W. Robinson, prize. Pathology.—H. S. Raper, prize; J. B. Fisher, certificate. Mental Diseases.—J. N. L. Thoseby, certificate. Pharmacology.—W. H. Hooton, prize; J. P. Brown, certificate. Ophthalmology.—G. H. Cross, prize. Gynaecology.—J. N. L. Thoseby, prize; G. H. Cross, certificate. Obstetrics (Scattergood Prize).—I. B. Bernstein, prize; H. V. Lamb, certificate. Public Health (Thorp Prize).—G. H. Cross, prize; J. B. Fisher, certificate. Forensic Medicine (Thorp Prize).—G. H. Cross, prize; J. B. Fisher, certificate. Medicine.—J. N. L. Thoseby, prize. Surgery.—No award. Surgery, Practical.—B. A. Slocombe, prize. Clinical Medicine (Hardwick Prize).—J. N. L. Thoseby, prize. Clinical Surgery (McGill Prize).—J. N. L. Thoseby, prize.

Gold Medal (presented by the Faculty of the General Infirmary at Leeds).—J. N. L. Thoseby.

#### Health of the City of London.

DR. COLLINGRIDGE, medical officer of health for the City, reports that during the quarter ended September 30th the City death-rate was 9.3, as against 11.4 in the rest of the metropolis, and the birth-rate 13.3, as compared with 24. Eleven cases of infectious disease were reported, and six notifications of pulmonary tuberculosis received. In the recess 1,601 houses were inspected and 30 notices served to abate nuisances. At riverside wharves 44 tons of unsound food were condemned. At the markets and slaughter-houses 345 tons of meat were seized, of which 84 tons were frozen meat. Out of 218 samples of food and drugs analysed, two of milk and one of saffron were found to be sophisticated. Of a total consignment of 4,663 carcasses of frozen Chinese pork received in July, 884 were thawed and examined, and 80 of these condemned as unfit for human food. At the mortuary 76,345 articles of second-hand clothing were disinfected prior to being exported to South Africa. Fifty-four bodies were received at the mortuary and 48 inquests held.

#### The Port of London and Infectious Diseases.

THE September returns give 789 ships as arrived in the Port of London from foreign seaports. Of these, more than half were British. In all 1,285 inspections of these vessels took place. In the same month 1,822 inspections of coastwise and inland navigation vessels were made by the medical staff. Seventeen cases of infectious disease were reported. The medical officer states that there has been a small outbreak of scarlet-fever and mumps on the training-ship *Warspite*. The former cases have been dealt with at the Marine Society's Hospital at Denton, and the others at the

isolation hospital on shore belonging to the *Warspite*. One case of anthrax has been reported, the patient being a sailor on board a vessel in which dried hides were being carried. Nine alien immigrant ships arrived during the month, bringing 235 alien steerage passengers. They were all medically inspected and admitted.

#### The Housing Bill.

THE Medical Officers of Health in the smaller districts are not given security of tenure. They are still left with their short periods of appointment, often from year to year only, knowing that any exhibition of zeal in the condemnation of insanitary property is as much as their places are worth. And, as if in irony, the County Medical Officers, whose duties bring them much less into contact with areas of small house property under the conditions that exist in district areas, are given the needed security—that is to say, they cannot be got rid of without the sanction of the Local Government Board. In the smaller areas private interests continually confront the sanitary officer in the execution of his work, and he, above all, should be secured from arbitrary dismissal for the conscientious discharge of his duty. Apparently it is too much to expect the House of Lords to give the security. Far from having made any attempt to render the position of the Medical Officer of Health in the smaller areas more secure, the House has actually gone out of its way to remove the security of tenure even of the County Medical Officers, which at any rate was secured by the Bill as it left the Commons.

#### Chinese Pork.

MR. BURNS: Inquiries were made by the Local Government Board some months ago, before this consignment arrived, as to the character of the pork, as to the method of feeding the pigs, and we were quite satisfied that they were perfectly satisfactory. I can only say, in answer to these further questions, that it has been said on the authority of the *Meat Trades Journal* that the pork is excellent of its kind, that this was proved by the prices realised, that it was sound and wholesome, and had passed the double inspection of the Port sanitary authority and the eagle eye of the practical meat inspectors of the Local Government Board.

#### Child's Death Under an Anæsthetic.

THE death of a boy, aged 12 years, was investigated by the Portsmouth Borough Coroner on the 6th inst.

The mother stated that her son had suffered lately from an obstruction in the nose, and she had been recommended to send him to the Portsmouth Eye and Ear Infirmary. He was sent there on the 27th ult., but died on October 4th.

Dr. A. Scott Ridout said that he first saw the child in July last, and he then came to the conclusion that an operation was necessary for nasal obstruction and adenoid growths. Dr. Paul Green, the official anæsthetist, administered, first chloroform and later a mixture of chloroform and ether. When under the anæsthetic, witness injected a small dose of adrenalin, with the object of restricting the flow of blood from the nasal vessels. This was what he usually did in such cases, and he had administered it with success in at least thirty cases. The child behaved very well under the anæsthetic, but after the injection of the adrenalin witness noticed a strange pallor of the face. This was very unusual, and witness immediately opened the mouth, pulled the tongue forward, and commenced artificial respiration. After a minute or two the child began to breathe again quite naturally, but continued to do so for only a short while. Witness continued with the artificial respiration for about thirty minutes, and, as a last resource, tracheotomy was performed, but without success.

Dr. P. Green corroborated Dr. Ridout's evidence. The patient showed no danger sign after the administration of the anæsthetic. When the needle used for the administration of the adrenalin was first injected, the child gave a slight movement.

Dr. Lysander Maybury gave evidence of the post-mortem examination. He said that the nose passage

was almost entirely obstructed. He considered that the introduction of the needle beneath the mucous membrane of the nose caused reflex action. That, with the reflex action caused by an attempt to vomit, not produced by the introduction of the needle, acted in a reflex manner upon the heart, causing inhibition or stoppage, and so producing fatal syncope. Witness did not think that the drug had anything to do with death. It was simply the insertion of the needle. He had used the drug himself, because it produced a bloodless field for operation, which was very important in the case of the nose and throat.

The jury returned a verdict of "Death from misadventure," and added that they thought every care had been taken.

#### The Murder of Dr. Lalcaca.

MR. M. M. GANDEVIA, Hon. Secretary of the Edinburgh Parsi Union, asks us to publish the following letter received by him from Lord Knollys on behalf of His Majesty the King:—

Copy of the letter from Lord Knollys, Private Secretary to the King, conveying His Majesty's gracious acceptance of the "In Memoriam" to Dr. Cowas Lalcaca, published by the Edinburgh Parsi Union.

"Balmoral Castle.

"Lord Knollys has had the honour of submitting to the King the copy of the 'In Memoriam' to Dr. Cowas Lalcaca, which accompanied Mr. Gandevia's letter of the 15th ult., and, in reply, is commanded to inform Mr. Gandevia that His Majesty has much pleasure in accepting it.

"Lord Knollys regrets that, owing to a slight accident, he has been unable to answer the letter before.

"October 9th, 1909."

#### Catholic University Medical School Past and Present Students (Conjoint).

At a meeting of the above students held in the Gresham Hotel, Saturday, the 9th, Dr. Adye-Curran presiding, the following resolution was proposed and passed unanimously:—"We, the past and present students of the Catholic University Medical School, with non-University 'qualifications,' respectfully approach the Governing Body of the National University and request that they will be good enough to consider the position occupied by us at present, and kindly say what concessions they would feel disposed to grant in the event of our seeking a medical or dental degree."

All those interested in the question are cordially invited to communicate with the Secretary, "Conjoint Cecilians," Apothecaries' Hall, Dublin.

### PASS LISTS

#### The Royal University of Ireland.

THE following candidates have passed the under-mentioned examinations:—

The M.B., B.Ch., B.A.O. Degrees Examination.—Upper Pass.—James A. Brown, James B. Butler, M.A., John J. Gilmore, James A. Hanrahan, Edward G. Kennedy, Ernest W. Kirwan, John M. McCloy, Thomas Scanlon.

Pass.—Charles Alexander, Joseph Anderson, John A. Black, Percy M. J. Brett, Bartly Byrne, Samuel R. Campbell, Francis S. Carson, David S. Clarke, B.A., Albert V. Craig, William Dickey, William A. Frost, Patrick Hayes, Jeremiah Holland, David Horgan, John C. Houston, David J. Jackson, B.A., Thomas Kennedy, Henry H. MacWilliam, B.A., William Magner, Thomas P. Magnier, Thomas J. S. Moffett, Alexander Patton, B.A., Samuel P. Rea, Jeremiah Reidy, David A. Rice, Alfred M. Thomson.

Exempt from further Examination in Medicine and Midwifery.—John H. Harbison, B.A., Queen's College, Belfast.

The following candidates may present themselves for the further examination for Honours in the groups set opposite their names:—

James B. Butler, M.A., Medicine, Midwifery; Bartly Byrne, Midwifery; Samuel R. Campbell, Midwifery; William Dickey, Surgery; John I. Gilmore, Medicine; James A. Hanrahan, Midwifery; Edward G. Kennedy, Medicine, Surgery; Ernest W. Kirwan, Midwifery, Surgery; John M. McCloy, Medicine; Jeremiah Reidy, Medicine; Thomas Scanlan, Surgery.

The M.D. Degree Examination.—John Finnegan, M.B., B.Ch., B.A.O.; Samuel J. Killen, M.B., B.Ch., B.A.O.; Charles B. Pearson, M.B., B.Ch., B.A.O.; Stephen B. Walsh, B.A., D.P.H., M.B., B.Ch., B.A.O.; Thomas Walsh, B.A., D.P.H., M.B., B.Ch., B.A.O.; Samuel H. Whyte, M.B., B.Ch., B.A.O.; James E. Wilson, M.B., B.Ch., B.A.O.

The Diploma in Mental Diseases Examination.—The following candidate has passed the examination:—Daniel Gillespie, M.D.

#### Royal Academy of Medicine in Ireland.

At the annual general meeting of the Royal Academy of Medicine in Ireland, held on Friday, October 8th, the following officers were elected for the session 1909-1910:—

President—Sir Charles B. Ball.

General Secretary—James Craig.

Secretary for Foreign Correspondence—Sir John Moore.

Medical Section—President, Walter G. Smith. Council—W. R. Dawson, H. C. Drury, J. A. Matson, T. G. Moorhead, J. F. O'Carroll, A. R. Parsons, G. Peacocke, F. C. Purser, E. J. Watson, W. A. Winter.

Surgical Section—President, John Lentaigne, P.R.C.S. Council—C. A. Ball, Alex. Blaney, Sir A. Chance, L. G. Gunn, W. S. Haughton, Seton Pringle, Henry Stokes, E. H. Taylor, W. Taylor, W. I. de C. Wheeler.

Obstetrical Section—President, H. Jellett. Council—Gibbon FitzGibbon, M. J. Gibson, A. J. Horne, F. W. Kidd, R. D. Purefoy, J. Spencer Sheill, Alfred Smith, Sir W. Smyly, E. H. Tweedy, T. H. Wilson.

Pathological Section—President, A. H. Benson. Council—William Boxwell, J. B. Coleman, H. C. Earl, L. G. Gunn, W. G. Harvey, H. C. Mooney, A. R. Parsons, R. J. Rowlette, J. A. Scott, A. H. White.

Section of Anatomy and Physiology—President, T. H. Milroy. Council—A. F. Dixon, H. M. Houston, E. L'E. Ledwich, E. P. M'Loughlin, W. H. Thompson.

Section of State Medicine—President, E. J. McWeeney. Council—A. E. Boyd, W. R. Dawson, T. Donnelly, T. P. C. Kirkpatrick, J. A. Matson, W. A. Winter.

#### University of Glasgow.

THE following candidates have passed the third professional examination for the degrees of Bachelor of Medicine (M.B.) and Bachelor of Surgery (Ch.B.) in the subjects indicated (P., Pathology; M., Medical Jurisprudence and Public Health):—

Thomas Adam, M.A., M.R.C.S. (P., M.); John A. Aitken (P., M.); Robert R. Archibald, M.A., B.Sc. (P., M.); John B. Baird, B.Sc. (M.); Charles S. Black (P., M.); James E. Black (P., M.); Alexander H. Brown (P.); James A. S. Burges (M.); Donald Downie (P.); Peter Drummond (M.); William D. Dunlop (P.); Thomas S. Fleming (P., M.); Joseph Graham (P.); John R. Haldane (M.); William Hamilton (M.); Angus Macaulay (P., M.); John G. Mackenzie (M.); Thomas J. Mackie (M.); Murdo Mackinnon (M.); Alexander T. McWhirter (M.); Frank W. Martin (M.); Robert S. Miller (M.); Clark Nicholson, M.A. (P., M.); Arthur S. Richmond (P., M.); John I. Russell (M.); Alexander H. Sinclair (M.); James D. S. Sinclair (M.); John T. W. Stewart (P.); John N. M. Sutherland (P., M.); William O. Taylor (M.); James L. Ure (M.); William S. Waterhouse (P., M.); James Williamson (Holytown) (M.); George J. Wilson (M.); John Young (P., M.).

Women.—Mary Alexander, M.A. (P., M.); Marie A. A. Beard (P.); Louisa E. Dodge (P.); Mary A. Pilliet (M.); Jemima Wallace (M.); Marion A. Wylie, M.A. (M.).

The following passed with distinction in the subjects indicated:—

First Examination.—In Botany—Robert H. Williamson, Marguerite Wilson. In Physics—John B. McDougall, James R. C. Mackintosh, Thomas M. Newton, Stanley Robertson, Stuart Robertson, Marion Thompson, Sarah A. Watson, Joseph B. Williamson. In Chemistry—John Sillars.

Third Examination.—In Medical Jurisprudence and Public Health—Thomas J. Markie, James L. Ure.



## NOTICES TO CORRESPONDENTS, &c.

**NOTES.** CORRESPONDENTS requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

### SUBSCRIPTIONS.

SUBSCRIPTIONS may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s.; post free at home or abroad. Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially-appointed agents. Indian subscriptions are Rs 15.12. Messrs. Dawson and Sons are our special agents for Canada.

**SHIR'S SURGEX.**—You should certainly test the urine quantitatively for sugar. A ready way is to take standardised solutions, and note carefully the amount of urine needed to reduce a given amount of Fehling's solution. The percentage is ascertained from these data by means of a table. Messrs. Newton, Gale and Co., London, have a portable urine apparatus, with tables fixed inside the lid. They supply standardised Fehling's solution, Nos. 1 and 2.

**G. R. S.**—In a typical case of acute appendicitis the chief symptoms are those practically of a local peritonitis, namely, pain, tenderness and rigidity of the right lower half of the abdomen, with some amount of fever, quickened pulse and constipation. But, as all surgeons of experience know, an abscess may be present with hardly any symptoms at all.

**THE VICTIM'S FATHER.**—Few women will go through the ordeal of exposing their folly in a court of law in order to punish an extortionate quack; but the threat of exposure is often enough to make a quack disgorge. Consult your solicitor.

**JUVENUS.**—Medical service on the P. and O. affords the opportunity of seeing the world, but literally gives little scope for increasing professional experience.

### WANTED A BRIGHT, DRY CLIMATE.

Two patients from different parts of the country have written us this week, asking if we "know of any place in England, where the climate is bright and dry, the soil gravel, and the water good," as they have been advised by their medical attendant, that it is necessary for them to reside in a district of this nature during the Autumn and Winter months. We confess that we cannot name such a spot off-hand, as climatic conditions have been so adverse of late, that all parts appear to have suffered alike. Can any of our readers speak from knowledge of any district where these conditions usually prevail?

**RHEUMATOID ARTHRITIS.**—A practitioner wishes to record the fact that a case of this disease in a lady member of his family, of middle age, has yielded to prolonged treatment with guaiacoli and iodide of potassium. The case began with *anæmia* and chronic indigestion—gastro-intestinal fermentation.

**JUSTITIA.**—A fee, under the circumstances, might be properly claimed from the husband.

**MEDICAL STUDENT.**—Sir Richard Quain, Bart, M.D., died on March 13th, 1893. He was not the author of "Quain's Anatomy," which was written by a namesake who predeceased Sir Richard.

**L. D. S.**—The choice of an antiseptic is often a matter of individual predilection—there is no such thing as the *best* antiseptic—all those which are commonly employed are equally good.

**M.R.C.S.**—A medical coroner, with some legal knowledge—is undoubtedly a better man for the post, than a legal coroner with no medical knowledge.

## Meetings of the Societies, Lectures, &c.

### WEDNESDAY, OCTOBER 20TH.

**MEDICAL GRADUATES' COLLEGE AND POLYCLINIC** (22 Chenies Street, W.C.).—4 p.m.: Mr. J. Cantlie: Clinique (Surgical). 5.15 p.m.: Lecture: Dr. W. H. B. Stoddart: The Prognosis of Functional Nervous Disorders.

**NORTH-EAST LONDON POST-GRADUATE COLLEGE** (Prince of Wales's General Hospital, Tottenham, N.).—Clinics: 2.30 p.m.: Medical Out-patient (Dr. T. B. Whipham); Skin (Dr. G. N. Meachen); Eye (Mr. R. P. Brooks). 3 p.m.: X-Rays (Dr. H. Pirie).

### THURSDAY, OCTOBER 21ST.

**ROYAL SOCIETY OF MEDICINE (DERMATOLOGICAL SECTION)** (20 Hanover Square, W.).—5 p.m.: Dr. J. M. H. MacLeod: "Cystic Rodent Ulcer" treated by Radium. Dr. H. G. Adamson: (1) Small Follicular Syphilide; (2) Multiple Scars simulating Leucoderma Syphilitica.

**OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM** (11 Chandos Street, Cavendish Square, W.).—8 p.m.: Card Specimens by Mr. B. Harman, Mr. R. Batten, Mr. B. James, Mr. J. H. Fisher, etc. 8.30 p.m.: The President (Dr. G. A. Berry): Introductory Address. Mr. P. Smith: (1) A Note on the Making of Pedigree Charts; (2) A Pedigree of Congenital Discolored Cataract.

**MEDICAL GRADUATES' COLLEGE AND POLYCLINIC** (22 Chenies Street, W.C.).—4 p.m.: Sir Jonathan Hutchinson: Clinique (Surgical). 5.15 p.m.: Lecture: Dr. G. Carpenter: Heart Disease in Children.

**NORTH-EAST LONDON POST-GRADUATE COLLEGE** (Prince of Wales's General Hospital, Tottenham, N.).—2.30 p.m.: Gynecological Operations (Dr. A. E. Giles). Clinics: Medical Out-patient (Dr. A. J. Whiting); Surgical Out-patient (Mr. H. W. Carson). 3 p.m.: Medical In-patient (Dr. G. P. Chappel).

**ST. JOHN'S HOSPITAL FOR DISEASES OF THE SKIN** (Leicester Square, W.C.).—6 p.m.: Chesterfield Lecture: Bullous and Vesicular Eruption (continued)—V., Herpes; VI., Zoster; VII., Dermatitis petitiiformis.

### FRIDAY, OCTOBER 22ND.

**ROYAL SOCIETY OF MEDICINE (SECTION FOR THE STUDY OF DISEASE IN CHILDREN)** (20 Hanover Square, W.).—4.30 p.m.: Dr. A. Dingwall-Fordyce: Notes on the Pathology of some Live Conditions in Childhood, with a Report of Three Cases. Dr. J. Walter Carr: Case of Pneumococcal Infection in an Infant simulating Generalised Tuberculosis.

**ROYAL SOCIETY OF MEDICINE (EPIDEMIOLOGICAL SECTION)** (20 Hanover Square, W.).—8.30 p.m.: Presidential Address: Dr. James Niven: The Relation of Poverty to Disease.

**ROYAL COLLEGE OF SURGEONS OF ENGLAND** (Lincoln's Inn Fields, W.C.).—5 p.m.: Prof. A. Keith: Specimens illustrating Various Forms of Congenital and Acquired Diverticula of the Alimentary Canal. (Museum Demonstration.)

**MEDICAL GRADUATES' COLLEGE AND POLYCLINIC** (22 Chenies Street, W.C.).—4 p.m.: Mr. S. Spicer: Clinique (Ear, Nose, and Throat).

**NORTH-EAST LONDON POST-GRADUATE COLLEGE** (Prince of Wales's General Hospital, Tottenham, N.).—10 a.m.: Clinique: Surgical Out-patient (Mr. H. Evans). 2.30 p.m.: Operations (Mr. W. Edmunds). Clinics: Medical Out-patient (Dr. A. G. Auld); Eye (Mr. R. P. Brooks); Skin (Dr. G. N. Meachen). 3 p.m.: Medical In-patient (Dr. R. M. Leslie). 4.30 p.m.: Lecture: Mr. R. P. Brooks: Squint.

**CENTRAL LONDON THROAT AND EAR HOSPITAL** (Gray's Inn Road, W.C.).—3.45 p.m.: Lecture: Mr. C. Nourse: Middle Ear Labyrinth.

## Appointments.

**CROWE, H. NEVILLE, M.B., Ch.B., M.R.C.S., L.R.C.P.Lond.**, Assistant Surgeon to the Ophthalmic Hospital, Worcester.

**GLASHAN, HERBERT W., M.B.Aberd.**, Assistant Medical Officer to the Natal Government Asylum, Pietermaritzburg.

**HUME, J., M.S., C.M., D.P.H.**, Clinical Assistant to the Chelsea Hospital for Women.

**LAPAGE, C. P., M.D.Vict., M.R.C.P.Lond.**, Lecturer in the Observation of Children and School Hygiene to the Manchester University.

**PRICE, E. W., M.R.O.S., L.R.C.P.Lond.**, Certifying Surgeon under the Factory and Workshop Act for the Narbeth District of the county of Pembroke.

**STADMAN, F. ST. J., M.R.O.S., L.R.C.P.Lond., L.D.S.**, Medical Superintendent of the National Dental Hospital jointly with Mr Sprawson.

## Vacancies.

**Westminster General Dispensary.**—Resident Medical Officer. Salary £120 per annum, with rooms, gas, coal, and attendance. Applications to the Secretary, 9, Gerrard Street, Soho, W.

**Leavesden Asylum.**—Second Assistant Medical Officer. Salary £180 per annum, with board, lodging, and washing. Applications to the Medical Superintendent, Leavesden Asylum, King's Langley, R.S.O.

**Staffordshire County Asylum, Cheddleton, Leek.**—Junior Assistant Medical Officer required. Salary £150 per annum, with board, apartments, and washing. Applications to the Medical Superintendent.

**University College, Cork.**—Demonstrator in Physiology, for Session 1909-10. Salary £150. Applications to the Professor of Physiology.

**Kent County Asylum, Maidstone.**—Fourth Assistant Medical Officer. Salary £175 per annum, with furnished quarters, attendance, coals, gas, garden produce, milk, and washing. Applications to the Medical Superintendent.

**Nottingham General Dispensary.**—Assistant Resident Surgeon. Salary £160 per annum, with apartments, attendance, light, and fuel. Applications to C. Cheesman, Secretary, 12 Low Pavement, Nottingham.

## Births.

**CLARKE.**—On Oct. 13th, at Rosethorne, Allerton, near Liverpool, the wife of Henry Clarke, M.B., M.A., of a son.

**LONGLEY.**—On Oct. 11th, at Strathorne, Salthurn, the wife of J. Alan Longley, F.R.C.S.E., of a daughter.

## Marriages.

**HAIG—BOYD.**—On Oct. 12th, at the Parish Church, West Bainton, Kenneth George, only son of Alexander Haig, M.D., F.R.C.P., and Mrs. Haig, of 7 Brook Street, London to Hester, third daughter of the late George Fenwick Eoyd and Mrs. Boyd, of Moor House, Leamside, co. Durham.

**ODELL—MOORE.**—On Oct. 14th, at Upton Church, Torquay, William Odell, M.D., F.R.C.S., of Fensdale, Torquay, to Ruth Anne, younger daughter of Joseph Moore, of Cuiros, Torquay.

## Deaths.

**CLIBBORN.**—Suddenly, of cardiac syncope, at 12 Bolton Gardens, London, W., William Clibborn, M.D., T.C.D., late of Dorset House, Bridport.

**LEE.**—On Oct. 13th at The Mounts, Thame, Herbert Grove Lee, M.D., aged 69.

**LINDSAY.**—On Oct. 15th, at The Oaks, Botley, Hampshire, Robert Lindsay, M.A., M.B., F.R.C.S.E., late Army Medical Dept., elder son of the late Rev. Robert Lindsay, I.L.D., Minister of Towie, Aberdeenshire.

**TATE.**—On Oct. 15th, at The Coppice, Nottingham, Sophia, wife of William B. Tate, M.D., in her 80th year.

# THE MEDICAL PRESS AND CIRCULAR.

"SALUS POPULI SUPREMA LEX."

VOL. CXXXIX.

WEDNESDAY, OCTOBER 27, 1909.

No. 17.

## NOTES AND COMMENTS.

**The Congress on Food.** THE Whitecross Congress that came to an end in Paris on Sunday last must appeal to the medical profession of all countries. Their labours ranged from the colouring matter of confectionery to the precise definition of Camembert cheese, with a whole gamut of things eatable and drinkable between and beyond those two extremes. The Syndicate for the Defence of Pure Coffee lodged an extremely neat protest, which should draw a good deal of international attention in these days of fiscal agitation. "The 120,000,000 francs," they say, "annually levied on the consumers of coffee in France ought at least to guarantee to them the possibility of taking it as they wish to do." And so say all of us who think that he who asks for coffee, and pays for coffee, should have coffee, and nothing but coffee—revenue or no revenue. According to the *Daily Telegraph*, "the unfortunate decision" of the Congress will permit chicory to be mixed with coffee without the buyers being informed of the fact by means of the label, which was originally recommended by this Section. That result hardly augurs well for the future of a pure food Congress, but wisdom may come with maturer age.

**Our Own Pure Food.** THERE is vast room for improvement in the food of the British Islands. It were trite to say that adulteration is rife on all hands, but truth is an essential attribute of triteness. One of the most extraordinary instances is the neglect of the Select Committee of 1899, presided over by Sir Herbert Maxwell, to inquire into the use of chemical preservatives and chemicals in food. In spite of their Report, nothing has been done to check the abuse, and boracic acid is daily used to an enormous extent in milk and other articles of food. The Committee stated at the time of their investigation that half the dairymen in London used preservatives. To secure a really practical and workmanlike Act, the preliminary analysis should be done away with in prosecutions, at any rate where it can be shown to be not absolutely vital to the case. All round us are bogus wines, faked butter, fraudulent adulteration of all kinds carried on wholesale at the expense of the public. Our real want is an automatic prosecuting authority that will replace the present intermittent, feeble administration of the Food and Drug Acts by local authorities.

**Aberystwith Guardians and Medical Fees.** THE Aberystwith Guardians are clearly inspired with a stern determination to save the pockets of the local ratepayers, at any rate, so far as the payment of medical fees is concerned. It would be a matter of general interest

to learn whether their expenditure in other directions is characterised by a parsimony resembling that shown at a recent meeting of the board. On the occasion in question, the vice-chairman, Mr. Edwin Morris, drew attention to a bill sent in by Dr. Bonsall, their medical officer, in which a charge of £1 2s. 6d. was made for certifying nine certified imbeciles. It appeared that one of the female imbeciles had been visited by another medical man with a view to her removal to the workhouse, but he was unable to satisfy himself that she was a certifiable lunatic, although on the borderland of insanity. The underlying implication, so far as can be gathered from a newspaper report (*Liverpool Daily Post and Mercury*, October 12th), appears to have been that, the woman's insanity being somewhat doubtful, the fee should not be paid for her medical examination. Eventually the Guardians passed the account, and the medical officer received his princely fee of half-a-crown for each case of lunacy certification, one of the most skilled and responsible duties a medical man could be called upon to discharge.

**A Half-guinea Chloroform Fee.** BUT the ball had been set rolling, and the Guardians of the Aberystwith poor had another opportunity of tightening the purse-strings. An account of one guinea was presented

by a medical man who had been called in to give chloroform to a pauper in the House. The case appears to have been one of midwifery, for which Dr. Bonsall received fifteen shillings, his contract fee. The Guardians objected to paying a guinea, and the House Committee offered to pay 10s. 6d. chloroform fee, in accordance with a resolution passed some time previously. Dr. Bonsall naturally asked what he was to do, supposing no outside medical man would attend for that fee. A member stated in answer that the Local Government Board had informed the Guardians that the medical officer was responsible for all the cases, and any assistance he required he would call in upon his own responsibility, leaving the payment to the discretion of the Guardians, subject to the approval of the Local Government Board. It seems that Dr. Bonsall has acted as medical officer for nineteen years, and that the guinea fee has been always hitherto paid. The Guardians, however, resolved in future to offer half-a-guinea for such assistance. It is to be hoped that no medical man in Aberystwith or the district will be found willing to accept so paltry and inadequate a fee for so arduous and responsible a professional duty.

**A Stomach Ball.** AN interesting case of the formation of a metallic ball in the stomach was reported the other day by the Medical Officer of Aston. An old woman who died under his care was found post-

mortem to have a hard globular mass about the size of a cricket ball in the interior of the organ mentioned. The explanation was that deceased had worked in the wire trade and had been in the habit of swallowing small particles of copper wire, which had gradually accumulated to form the ball. The whole subject of these accretions is interesting. They are most common in cows, when they are, as a rule, composed of a firm felted mass of short hairs that have been licked off the coat of the animal. At times they are found in the horse and other animals, and occasionally reach a considerable size. The danger of such a foreign body in the stomach does not appear to be excessive. In mankind the condition most frequently occurs amongst lunatics, especially those who are in the habit of chewing or swallowing string, hair, cotton, and so on. It has been reported amongst sempstresses who have been accustomed to bite off the ends of their sewing thread. Occasionally jugglers accumulate a great felted mass of metal, glass, and other objects, sometimes to the extent of several pounds weight. Under these circumstances the stomach is often displaced downwards, and may reach the pelvis. Death not uncommonly results, even when the mass is removed by operation.

## LEADING ARTICLES.

### INEVITABLE DEATH AND THE COMPENSATION ACTS.

THE working of the Workmen's Compensation Act has revealed some of the practical difficulties that are inseparable from the application of fresh legislation to complicated social relations. From the first publication of the measure we asserted that sooner or later employers would demand a certificate of physical soundness from their employees. It is obvious that a decrepit person, or one handicapped by some defect of body or mind, would be more prone to accident, less capable of recovery, and more liable to become involved in secondary complications that affect less resistant individuals. A case in point was investigated recently at a St. Helens inquest, where a man aged thirty-eight years, for three years had been attended by a medical man for chest trouble, and latterly for consumption. It was shown in evidence that early in the present year deceased had injured his knee while working in a colliery, and he was off work in consequence for a period of twelve weeks. When he began work again he told his relatives that his employers had found him a light job. On April 8th he received another injury through a runaway pony in the pit, whereby he sustained a wound at the side of his head. On that occasion the account he gave to his friends was that he had been knocked down in the pit and run over. After the second accident he was in the St. Helens Hospital ten weeks, then at home a month, and afterwards in the Providence Hospital, where it is to be presumed he died, although the fact is not mentioned in the report of the inquest given in the *Liverpool Daily Post and Mercury*. The post-mortem examination showed that the wound at the side of the head was healed, and there were no signs either of fracture or of injury to the brain. The body was terribly emaciated, and death was due

to consumption. That view was held both by the medical attendant of deceased and by the medical man who represented the colliery proprietors. The latter said emphatically that the condition of the left lung was such that it was a wonder the man had lived so long. The point of difference between these two witnesses was whether or not death had been accelerated by the accident. While the one held that the accident had shortened life, the other failed to see how the injury could in any way have hastened death. With a view of shedding fresh light on the problem, another medical man was sent for, but his evidence did not materially aid the Court in arriving at a decision. This third expert witness pointed out that the man must have benefited very considerably from the hospital treatment and good nourishment. On the other hand, the injury and the subsequent loss of blood would render his condition less favourable. On being further pressed, the witness said, as a matter of opinion, that in all probability the injury must have devitalised deceased and rendered his resisting power less, and so hastened death; but that view was not capable of proof. The jury unanimously decided that death was due to consumption, but it was accelerated by the injury accidentally received. As this case will possibly, or probably, be the subject of further legal procedure, it cannot be discussed further here. Upon the general question, however, as to the employment of persons suffering from severe constitutional maladies, it may be permissible to offer a few remarks. Clearly, a man wasted, let us say, by diabetes or some malignant internal malady, would be less alert than a healthy person and more liable to meet with accidents. More than that, his judgment would be probably impaired owing to an impoverished blood supply. Then, again, he would be less resistant to shock and to the secondary complications of wounds than the average normal individual. From these and other considerations of a similar kind that could be brought forward it seems impossible to avoid the conclusion that, from a selfish point of view, the employer will run least risk both as to the occurrence of accidents and as to the severity of their results when he causes to be made a careful preliminary examination of the state of the health before engaging any workman. There is little room for sentiment or romance in the Workmen's Compensation Act, and it seems likely that even if the employers do not generally insist upon the preliminary medical examination, that sooner or later the step will be taken by the insurance companies as a necessary safeguard of their own interests.

## CURRENT TOPICS.

### Sociology and Evolution.

IN his opening lecture at the School of Sociology last week, Major Leonard Darwin dealt with questions that have been thoroughly discussed in these columns, although, no doubt, they still need reiteration before popular audiences. No medical man needs to have pointed out to him the fact that strenuous efforts are now being made in many

directions to counteract the natural workings of the evolutionary process on the human race, with the result that many sickly and feeble people survive to become parents, who formerly would have perished unmarried. It is a question, as Major Darwin suggests, whether, as a nation, we are now deteriorating in both body and mind. If we are not now a decadent nation, this, it is certain, may soon be our fate if due effort be not made to combat the ultimate evil results attendant on our increasing civilisation. It is quite evident that the study of the future effects of present reforms, and of new customs and conventions, is especially imposed upon us in this epoch of rapid changes. Major Darwin's sole practical suggestion is contained in a somewhat vague statement with regard to feeble-minded girls, who, he thinks, might have imposed upon them a certain curtailment of their liberty, we presume in the direction of matrimony. There cannot be the least doubt that civilised society is consciously, or unconsciously, carrying on a gigantic system of artificial selection, which favours, to a great extent, the survival of the unfit. Major Darwin, in illustrating this fact from several points of view, did not refer to the probable effect of the practice of limiting the number of children when carried to the extent now universally customary in France. The first one or two children are safeguarded through childhood to adult age, and then provided with mates in matrimony. Virtually, no French man or woman marries "for love," and however unfit be the girl for maternity—within very wide limits—a husband is found for her if she possesses a sufficient fortune. However physically and mentally fit a penniless girl may be no Frenchman will take her as a wife—as a barren mistress it is a different question. If, on the other hand, families were large, and the question not one of money alone, the girls and boys most fitted would gain mates, and evolutionary forces would have fair play. This is a point that has not been touched upon by our able correspondents, who so strenuously insist that the stationary population forms strong evidence of the decadence of the French race.

#### Lombroso's Achievements.

VERY few latter-day men of science have got through the amount of work performed by the late Professor Lombroso, and probably none who has wrought so strenuously has left so poor a record of solid achievement. Lombroso's work in physiology and criminology has been valuable in its suggestive quality, but of little use in establishing solid facts upon which generalisations could be based. His attempt to prove that all criminals are degenerates and to establish an anatomical theory of crime, did not succeed; but the fact upon which he insisted, that great classes of habitual malefactors are of an innate criminal type, and as such are not amenable to reason, or punishment, is now generally accepted. Some of our recent legislation has been evidently influenced by Lombroso's teaching—especially the laws providing for the preventive detention of those leading persistently dishonest or criminal lives. Lombroso had more than a touch of scientific genius, but he was always in too great a hurry to publish, and his reputation would have stood higher if he had sifted out, and presented to the world the valuable grains of new knowledge that were always discoverable amid the

mass of chaff which enveloped them. Lombroso's scientific qualities were never perhaps better manifested than in the work he performed in 1872 when he demonstrated the true character of pellagra, a disease then widely prevalent among the peasantry of Lombardy. The disease began in the skin, and afterwards affected the brain and nervous system. Lombroso discovered that the malady was due to diseased maize, the staple food of the people. He extracted the poison from the grain, and infected animals with it. His discovery was received with derision, and something very like a persecution was started against him by the landowners whose interests were affected. In the end the validity of Lombroso's discovery was fully established. Berthelot, the French chemist, whose attention was drawn to the matter, entered upon an independent inquiry and proved conclusively that the diseased maize contained a toxin which closely resembled strychnine, whilst differing from it in some important particulars.

#### Malarial Prevention in India.

UNDER this heading a month ago, we briefly summarised the views of Sir Ronald Ross which he had communicated to the *Times*, with regard to the then impending Imperial Malaria Conference. Sir Ronald Ross expressed the fear that too much importance might be given perhaps to quinine prophylaxis, and too little attention directed to the anti-mosquito campaign. Whether or not the Conference, which was held last week in Simla, was influenced by Sir Ronald's arguments, it has certainly adopted fully his ideas, without, however, neglecting other considerations. The Conference recommends, first of all, the appointment by the Government of India of a scientific investigation committee, to be linked up with special organisations for dealing with malaria in each province. Practical measures are next insisted upon, the extirpation of anopheles having among these a first place. Minor drainage operations; the restriction of wet cultivation near towns; the introduction of fish into tanks and other collections of water, and the oiling of small collections of water which cannot be filled up, are all aimed at the end Sir Ronald had in view. With regard to the use of quinine, detailed recommendations were made by the Conference to facilitate its sale in small quantities, and to induce private vendors to engage in its distribution. The Conference laid stress upon the importance of education, and recommended that committees of officials and non-officials, should be formed to spread among the people knowledge regarding malaria and the measures which it is possible to take against it; also that the subject should be taught in the schools.

#### The Royal College of Surgeons in Ireland.

AT the opening of the winter session of the College of Surgeons in Ireland, last week, the President, Mr. Lentaigne, again drew attention to the serious dangers which threaten the future career of the College. As has already been stated, the College is without endowments or funded property to any extent, and is dependent for the greater part of its income on the fees paid in the School. The School is now threatened with competition of an unaccustomed character. The position now is, that, whereas the School

of the College of Surgeons is practically dependent on fees paid by its students, all the other schools in Ireland either have considerable endowments or Government grants. In fact, of the six medical schools in the country, four are in direct receipt of Government funds, while the fifth, that of Trinity College, has fair endowments from other sources. In particular, the rivalry of the new and richly endowed University College School is likely to prove serious. There was, we understand, some fear that the newcomer would attempt to undersell its older rivals by lowering the scale of fees, but we are glad to observe from certain preliminary statements issued that the fees are to be approximately the same as those demanded in other Irish schools. The next few years are likely to be critical in the history of the Irish College, and the President and Council may be assured of the sympathy of their professional brethren in their attempt to maintain the only school in Ireland whose management is entirely in the hands of the profession.

#### Campaign against Tuberculosis in the United States.

IN a popular address, some months ago, Sir Frederick Treves expressed the opinion that the time was coming when mortality from preventable diseases which now count their victims by the hundred thousand annually, would become as rare in these islands as death from the bite of a rabid wolf; and there can be no doubt that when the nations shall have brought their sanitary administration up to the level of scientific knowledge and achievement, many deadly maladies, up to lately, regarded as calamities against which no protection was possible, will be extinguished. Plague and cholera, it is safe to say, will never again occur in wide epidemic form in Western Europe; science has taught the sure methods of prevention; and application of similar methods will surely, in time, render such diseases as typhoid fever and tuberculosis and rickets—the scourges of the poor—equally uncommon. The prevention of many diseases has been reduced to a mere matter of expense, and this especially applies to tuberculosis. For instance, if funds were available it might be possible to stamp out tuberculosis among cattle, and thus at once put an end to a great source of infection; whilst the isolation of human subjects in the infectious state is also a question almost entirely of expense. The facts have become more fully recognised in the United States than anywhere else in the world. We learn from a telegraphic dispatch from New York in the *Times* that appropriations amounting to more than £800,000 for this purpose have been made by State legislatures during the present year; that £600,000 at least will have been furnished by counties and municipalities, whilst the Federal Government has granted nearly £200,000 for the support of sanatoria. Sanatoria have been erected in twenty-seven States, and many more have been authorised. Besides all this, a large amount of work is being carried on by benevolent and voluntary organisations. One fraternal society of workmen is building a tent city of 1,000 acres near Colorado Springs, and

numerous other similar bodies are following this example on a small scale, whilst a wide propaganda of education is being carried on which promises to make the people all fully conversant with the measures necessary to escape the dangers of “the white plague.” If this work be continued in the same spirit, tuberculosis, it may well be believed, will be before long discoverable only in sporadic cases through the territories of the United States.

#### Is Lunacy on the Increase?

THE evergreen question amongst journalists and magazine writers is, whether or not lunacy is on the increase amongst our population. If we judge from undigested figures pure and simple the outlook would indeed be of a most discouraging kind, both as regards progress from year to year and from generation to generation. There are, of course, many obvious fallacies in modern asylum returns as compared with those of our grandfathers. Diagnosis is now more complete and general, and village idiots and imbecile paupers are nowadays placed in special institutions. The less obvious fallacies are those with which we are mainly concerned, namely, those that explain away or minimise the yearly increasing figures of to-day. The recent returns of the Asylums Committee of the London County Council, for instance, show 26,648 insane persons chargeable to the metropolitan rates on January 1st, as compared with 26,170 a year before. The average annual increase for the past 19 years is 506, an increase out of proportion to the normal increment of population. The increase is explained by the Committee as in previous years, that much of the apparent increase is to be explained by the lowered death-rate and the consequent accumulation in the asylums of chronic cases; also in part to a more comprehensive registration, and not necessarily to a greater prevalence of insanity among the population. The lessening of the death-rate has been much greater among the males than females, being in the proportion of 4 or 5 per cent. in the men to 1 per cent. in the women. Both the recovery-rate and the death-rate for 1908 were lower than the corresponding rates for 1907, and the total number of direct admissions to the London County Asylums during the year exceeded the discharges “recovered” and deaths by 894. The actual number of patients for whom the London County Council was directly responsible in the asylums was 19,716, of whom 8,578 were males and 11,198 females.

#### Inspection of Schools in Ireland.

FOR some inscrutable reason, when Parliament established a system of medical inspection of schools in England, Ireland was not included in the Act, though, unfortunately, there is reason to believe that medical inspection is more needed in Ireland than in England. Last year, when the Board of Intermediate Education resolved to introduce, for the first time, a system of inspection into Irish secondary schools, we strongly urged the appointment of one or more medical men as inspectors. Unfortunately, our advice was not taken. Nevertheless, we had reason to hope that inspection by educated laymen would exert a salutary influence

on the domestic and hygienic arrangement of the secondary schools of the country, as it was assumed that the inspectors would not be limited in their scope to mere inspection of teaching, but that surveillance of the entire school system—including domestic arrangements, games, time-tables—would come into their duties. To such a wide sphere of activity a sudden but strong opposition has arisen. A large number of boarding-schools have protested against the system of inspection going beyond the class-rooms, and the protest has been supported by some in high positions of influence. We can only say that we hope the Intermediate Board will show itself as determined to have a thorough system of inspection, as it has shown itself in many less obviously righteous decisions. We consider the hygienic system of the school of much more importance to the welfare of the pupils than the instruction they receive, and we therefore believe inspection of the former the more important. We regret that the Board has left itself without the assistance of those best qualified to judge of matters of hygiene.

### **Peculiar People, Christian Scientists and the Law.**

THE law has been so clearly laid down in late years by judges in criminal courts that there should remain little doubt in the minds of leaders of eccentric sects like the Peculiar People and the Christian Scientists as to their responsibilities when undertaking the treatment of sick people, and the cases in which a charge of manslaughter is preferred should in future become more and more rare. The law is very much in accord with common sense. There is no law to compel people to call in medical help when ill. They may be suffering from some surgical affection curable by a simple operation, but certain to end fatally without the aid of the surgeon's knife, and if they elect thus virtually to commit suicide they cannot be interfered with, nor can their friends or attendants be made responsible for not pressing or forcing medical services upon them. Responsibility would, however, arise if the patient were obstructed in calling in a doctor. If the patient were mentally incompetent or imbecile the custodians would be bound to seek medical advice under penalty of a charge of manslaughter in the event of a fatal result. The Children Act makes it imperative to call in a doctor in cases of serious illness, and this statute would render certain a conviction for manslaughter in any case where medical services had not been sought, and it was proved that the death might have been averted by timely treatment.

## **PERSONAL.**

THE King visited Norwich on Monday for the purpose of presenting colours to, and reviewing the Norfolk units of, the Territorial Force, and of laying the corner-stone of the new wing of the Norfolk and Norwich Hospital, and was enthusiastically welcomed.

HIS MAJESTY KING EDWARD VII. by connecting an electrical current in West Dean Park, Chichester, England, on Thursday last, caused the doors of the Royal Edward Institute (for the study and cure of tuberculosis), Belmont Park, Montreal, to open, and the Royal Standard was hoisted at the King's touch.

PROFESSOR PETER THOMPSON, M.D., Ch.B., of King's College, has been appointed professor of anatomy at Birmingham University, and will shortly take up his duties there.

DR. HENRY JELLETT has been elected King's Professor of Midwifery in the School of Physic in Ireland, Trinity College, Dublin, in succession to Sir Arthur Macan, deceased.

MRS. JOHN NIXON "well and truly" laid the foundation stone of the new wing at Cardiff Infirmary on last Thursday afternoon, the chairman (Major-General Lee) invited donors to place gifts on the stone.

DR. JAMES PORTER, M.A., M.D., Medical Director-General of the Royal Navy, who has been attending the Naval Medical Conference in Washington, has returned to London.

PROFESSOR T. H. BRYCE, successor to Professor Cleland in the Chair of Anatomy in the University of Glasgow, was formally introduced to his students on the 18th inst., by Principal Sir Donald MacAlister.

DR. ANDREW J. HORNE has been elected President of the Royal College of Physicians of Ireland, and Dr. E. MacDowell Cosgrave, Vice-President. The full list of officers elected last week will be found in another column.

AFTER the Harveian Oration at the Royal College of Physicians of London delivered by Dr. Savage the Moxham Medal was presented to Sir William Gowers and Weber-Parkes prizes to Dr. Cormack Wilkinson and Dr. Arthur C. Inman.

AT the same time the President of the College conferred *in absentia* the Baly Medal upon Professor Emil Fischer, of Berlin, who was unable to be present.

WITH the object of recognising the sterling worth of Dr. James Lloyd, who has been resident in Llanbradach for fourteen years, the tradesmen and others entertained the worthy doctor at a banquet at the Llanbradach Hotel. A large number of guests were present. Dr. Lloyd was presented with an address and several handsome presents.

THE Committee in charge of the testimonial to Professor Ogston desire to intimate that members of the medical profession wishing to contribute should send their subscriptions to the honorary secretary, Dr. Mackenzie Booth, 1 Carden Place, Aberdeen, at an early date, as the subscription list must soon be closed.

DR. JOHN HODGSON WATERHOUSE, M.D., of Avenue Victoria, Scarborough and formerly of Maltby Grange, Rotherham, late house surgeon to the Liverpool Northern Hospital, and consulting surgeon accoucheur to the Sheffield Royal Hospital, who died 26th August last, aged 78 years, left estate of the value of £43,997 10s. 9d., of which the net personalty has been sworn at £43,927 10s. 9d.

MR. ROBERT JONES, F.R.C.S.E., hon. surgeon to the Royal Southern Hospital, Liverpool, has been awarded by the Royal College of Physicians, Edinburgh, the Victoria Jubilee Liston Prize of £100 for the greatest benefit done to practical surgery by a Fellow or Licentiate of the college during the quadrennial period from 1905. The prize was instituted by the late Dr. Robert Halliday Gunning.

DR. J. K. COUTTS, of Valentine House, Blackley, was in Chapel Lane when a heavily laden lorry collided with his carriage. The doctor and his man were thrown into the street, while the carriage was smashed. Dr. Coutts was assisted by Sir Frederick Cawley and Mr. Whittaker, of Heaton Mills, who happened to be in the district, and after some attention he was able to resume his round. His attendant was badly shaken.



# A CLINICAL LECTURE ON HYPERTROPHY OF THE PROSTATE AND ITS TREATMENT.

By Prof. PAUCHET,

Paris.

[SPECIALLY REPORTED FOR THIS JOURNAL.]

HYPERTROPHY of the prostate gland is very common in men over 55 years of age. A third part of aged men present a large prostate, but only 5 per cent. suffer from urinary troubles requiring treatment. Eight times out of ten this hypertrophy is due to glandular degenerescence of the organ bearing on the two lobes, and is ovoid in shape, with the large end reposing on the middle aponeurosis of the perinæum, while the small extremity bulges into the cavity of the bladder.

The volume of the diseased prostate is that of a walnut or a small orange, and its weight is between one and three ounces.

The prostatic portion of the urethra is elongated, and a catheter introduced into the canal must be pushed almost to the extremity to withdraw the urine. Developing towards the bladder, the prostate pushes up the vesical orifice, creating a *bas fond* behind it; this *bas fond* never empties completely at the moment of micturition.

As soon as the lobes become hypertrophied, the flow of urine is more or less impeded; the bladder makes an effort to overcome the obstacle, thus producing compensating hypertrophy of the muscular coats. But soon these repeated efforts result in vesical fatigue, the bladder loses gradually its contractibility and ceases to empty itself completely.

This incomplete evacuation amounts, at the beginning, to a residue of four or five ounces of urine which remain after each micturition, representing incomplete retention without distension. But if the vesical paresis increases, the bladder will only empty itself by engorgement. The flow occurs not only at the moment of micturition but also in the intervals (incontinence). This condition constitutes distension, distension which attains not only the bladder but the ureters and even the hyx.

As regards the anatomical varieties of prostatic disease, one out of ten cases is undergoing epitheliomatous degenerescence, but of slow development (one, two or four years).

Hypertrophy of the prostate is admirably disposed for decortication; each lobe is provided with its own capsule, while both lobes, together with the prostatic portion of the urethra which runs between them, are enclosed in a common capsule, from which they are separated by a layer of cellular tissue, facilitating singularly enucleation. The musculo-fibrous envelope protects the perivesical cellular tissue against infiltration of urine and pelvic cellulitis, while retraction of this tunic obliterates the veins running through it, protecting thus against hæmorrhage or infection operation.

*Treatment.*—Every patient who, after micturition, presents a residue of four ounces, should use a catheter regularly, entering thus on catheter-life. Where the residue does not exceed four ounces the patient should use the instrument but once a day, and that before going to bed; this precaution will give him several hours sleep. If the residue reaches six ounces the catheter should be used twice a day, while for ten ounces it should be

passed every three or four hours. The patient should never wait for a pressing need to evacuate his bladder, otherwise vesical congestion and cystitis might result.

The best catheter is the soft catheter of Nélaton, but if it cannot force the obstacle, the catheter à bequille should be employed.

If a rough passage of the instrument provokes hæmorrhage or a rise in temperature, or if the patient presents symptoms of cystitis (cloudy ammoniacal urine), the catheter should be left *in situ*. The method is simple: a piece of gauze bandage is rolled around the penis and maintained with a few stitches; the instrument is introduced as far as the neck of the bladder and no farther, otherwise it would not be easily borne; four little strings of soft cotton thread are tied around the catheter at its point of exit and fixed to the four sides with sticking-plaster. The end of the instrument is kept closed by a small wooden peg or a glass stopper when possible.

According as the urine is clear or cloudy, the bladder will be washed out more or less frequently. The catheter will be changed every twenty-four or forty-eight hours, unless a false route has been made, in that case it should be left in only five or six hours.

Where palliative treatment is insufficient and the age of the patient is no counter-indication, prostatectomy should be proposed. The gland can be reached either through the perinæum or through the bladder. The former method is reserved for stout subjects, in whom the organ can be felt generally low down.

The prostate might be compared to the fruit of a chestnut tree, containing two nuts; the operation of prostatectomy consists in enucleating these two kernels by leaving behind the green pericarp or fibrous envelope. This common tunic forms a closed barrier against urinary infection and infiltration, and it is to this anatomical particularity that prostatectomy owes its benignity. The more the lobes increase in size, the more their individual capsules are distinguished from the common envelope and the more easy is the enucleation.

The bladder is first washed out with a weak solution of oxygen water, after which two or three syringes of air are injected in order to distend the bladder, and a tight bandage is placed on the penis to prevent the escape of the air. The incision commences at the pubis and extends up the middle line for two or three inches, in stout persons the incision should be longer. When the linea alba is brought to view and cut, the recti muscles are separated with the closed scissors and the peritonæum pushed upwards; at the bottom of the wound the bladder appears, easily recognisable by its grey and rose aspect and its two vertical veins.

The bladder is incised for about half an inch and the index of the right hand passed into the cavity. If any calculi are present they are removed and the bladder washed with an antiseptic solution (oxygen water). The index of the left hand, armed with a rubber finger hood, is

introduced into the rectum to sustain the prostate and push it forward. The right forefinger attacks the prostate through the vesical cavity at the most salient point and close to the orifice of the urethra. Generally the pressure alone of the finger suffices to erode the mucous membrane. If the tunic resists, the operator can fix on his finger an artificial metallic nail. As soon as the membrane is severed, the finger comes in contact with the adenomatous mass, it follows its surface, finds a point where it can pass under the common covering and enucleation begins. When the right finger, aided by the left in the rectum, has passed all around the tumour, the latter becomes mobile, and is only retained by the urethra as an apple to the tree by its stalk. Another effort of the finger tears the urethra, and the mass rolls freely into the vesical cavity. The rupture of the canal takes place right behind the veru montanum, consequently only a small portion of the urethra is suppressed, and as the prostatic segment is always considerably elongated, the solution of continuity is of little consequence, which, in any case, heals rapidly without leaving trace of stricture.

The two post-operative complications to be feared are infection and hæmorrhage. Cellular infection of the pelvis is rendered impossible by the method of intra-capsular enucleation, but general infection remains always possible through the numerous veins which surround the prostate; the same veins may bleed freely, consequently, after enucleation, retraction of the prostatic cavity should be obtained, and this is effected by vesical and rectal massage executed by the fingers for a few minutes.

Drainage is assured by Freyer's large tube, about  $3\frac{1}{2}$  ins. in length, and furnished with parallel oval holes. The tube is introduced into the bladder for about half an inch, and no farther, on no account should it touch the *bas fond* of the bladder. The business of this tube is simply to keep open the lips of the wound, and should be withdrawn between the third and tenth day. It sometimes happens that hæmorrhage sets in from the tenth to the fifteenth day in patients where the incision healed too rapidly; in that case, the wound should be reopened and a smaller drain inserted.

The age of the patient is a considerable factor in prostatic disease, as well as his general condition. As regards the latter, a whole variety of chronic affections may be encountered: heart disease, arterio-sclerosis, softening of the brain, chronic bronchitis, albuminuria, diabetes, obesity, voluminous hernia, etc. In such necessarily short-lived persons, prostatectomy can be only indicated where all other means had failed.

As to the variety of the lesions of the prostate, the rectal touch permits to diagnose if the dysuric accidents are due to cancer, to glandular prostatitis, to peri-prostatitis, or, in fine, to adenoma. This latter form is the most amenable to surgical treatment.

NOTE.—A Clinical Lecture by a well-known teacher appears in each number of this journal. The lecture for next week will be by James Donelan, M.Ch., M.B., Chevalier of the Crown of Italy, Laryngologist to the Italian Hospital, London. Subject: "Suppuration in the Accessory Nasal Sinuses."

SIR FREDERICK TREVES, Bart., G.C.V.O., Sergeant-Surgeon to His Majesty the King, was last Thursday evening the guest of the Liverpool Philomathic Society at their 84th annual dinner, held at the Adelphi Hotel. He devoted his address to describing the declining use of the hands in various industries.

## ORIGINAL PAPERS.

### SIX CONSECUTIVE CASES OF APPENDICITIS, OPERATED UPON, WITH NOTES THEREON OF PRACTICAL INTEREST TO THE GENERAL PRACTITIONER.

By S. J. ROSS, M.D., CH.B.,

Senior Assistant Surgeon to the Bedford County Hospital.

CASES of appendix mischief are nowadays so very common that some of your readers may wonder why I should bring the subject before their notice. I do so, as in cases of appendicitis, just as in other abdominal cases, you can never prophecy, with any hope of certainty, the condition with which you will have to deal.

The first patient was a healthy man, æt. 24, who for three years had been frequently troubled with "bilious attacks," for which he never sought medical advice. The last attack was, however, a more severe one than the previous ones, and he was compelled to seek medical advice. I saw him on the third day of the attack. His temperature was only 99°, but his pulse-rate was 120; his right thigh was flexed upon the abdomen, he complained of pain in the region of the umbilicus, and there was marked tenderness in the right iliac fossa. I diagnosed appendicitis and advised an immediate operation, to which he readily consented. I made the usual incision, which is one, the centre of which is a little below a line passing through the junction of the outer and middle third of a line drawn from the umbilicus to the anterior superior iliac spine of the right side. There were many adhesions, which made it a matter of considerable difficulty to bring the cæcum up to the surface of the wound. While carefully separating these adhesions I came across a stercolith. I then found the appendix, which was only  $1\frac{1}{2}$  inches in length, and, having freed it, I removed it close to the cæcum. I then buried the stump in the cæcum by a purse-string suture. I closed the wound in three layers. Upon opening the appendix after the operation, I found that the lumen was obliterated at the tip for an inch, and that there was a perforation close to its base, through which, doubtless, the stercolith had escaped. The patient made an uninterrupted recovery.

The second patient was a female, æt. 19, who had had three definite attacks of appendicitis. The last attack was ushered in by diarrhoea, and vomiting was very frequent. There was marked tenderness over the appendix region. Rectal examination revealed the presence of a large abscess. The abdomen was opened by the usual incision, and a large quantity of evil-smelling pus was released. As the condition of the patient was satisfactory, I proceeded to search for the appendix, which I found buried in adhesions; having freed it, I removed it. The abscess cavity was very thoroughly swabbed out with 1 in 500 biniodide in alcohol solution. A posterior drain was then inserted, through an incision made just above the iliac crest. The anterior wound healed by first intention. The drainage tube was removed from the posterior wound on the sixth day, when there was no further discharge. In fourteen days the posterior wound was healed.

The third case is that of a female patient, æt. 25. Six months before the present attack she had her first attack. She complained of pain over the appendix, and a lump the size of a pigeon's egg was easily felt. Upon opening the abdomen, a hard mass was felt in the appendix region, which was far larger than external examination had led

us to suppose. The cæcum was identified, and the mass, consisting of the appendix and enlarged glands buried in adhesions, was brought up as near as possible to the surface of the wound. A piece of inflamed appendix was dissected out from its bed of adhesions with the fingers. This proved to be a bend in the appendix near its base. The remainder of the appendix dipped down into the pelvis, the tip hanging over the pelvic brim. The appendix was dug out of its bed of adhesions with great care and removed, the stump being buried in the cæcum. The wound was closed in three layers, a small wick of gauze being inserted into the lower end, and a loose stitch being left ready to be tied when the gauze was removed. The wick drain was removed in twenty-four hours as there was no discharge, and the loose stitch was tied. The wound healed by first intention throughout its entire extent.

The fourth case was that of a youth, æt. 25. I had attended him through four definite attacks of appendicitis, the main symptoms of which were vomiting, abdominal pain, marked tenderness over the right iliac fossa, and constipation. Fever was present in all the attacks. I repeatedly urged him to submit to operation, but he could not spare the time necessary from business. However, his last attack was very acute and he consented to have the operation.

I made the usual incision over the appendix. The appendix was found with ease, its tip reaching across the middle line to the left side. It was very inflamed and its outer surface covered with lymph. I removed it and buried its stump in the cæcum. The abdominal wound was closed in three layers. The patient made an uninterrupted recovery. Upon opening the appendix, the mucous membrane was found to be very injected, and in places hæmorrhage had occurred; the wall of the appendix was thickened and the contents were purulent.

The fifth case was a female, æt. 20, who had complained of pain in the region of the right hip for a year. She had been told that she was suffering from hip disease. The hip-joint was found to be normal. There was tenderness in the right iliac fossa and also in the right loin. I explored the appendix by the usual incision. The cæcum was readily discovered. The appendix was found lying behind the ascending colon, fixed by adhesions and perforated in its centre. I freed it and removed it, burying the stump in the cæcum and covering the area with great omentum. The patient made an uninterrupted recovery.

I was called into consultation to see a boy, æt. 8, with the following history:—Five days before I saw him he had a "bilious attack," which was treated by home remedies. Two days after this he was seized with abdominal pain and vomiting, and his medical attendant was called in. He had also a rigor lasting half an hour. When I saw him his condition was as follows:—His abdomen was very distended. There was marked tenderness over the right iliac fossa, and a mass to be felt in the appendix region. His right thigh was flexed upon his abdomen. Vomiting was very frequent. His pulse was imperceptible, his extremities were cold, and it was obvious that operation was out of the question. He died a few hours after my visit.

#### REMARKS.

These cases teach us how very important it is that the layman should, in cases of abdominal pain, consult a medical man, and not trust to his own powers of diagnosis.

The first case illustrates this point very clearly. If this man had not had this severe attack, doubtless he would never have consulted a medical man, and, considering the state of his appendix as

revealed at the operation, another neglected attack might have ended in a fatal attack of septic peritonitis.

Temperature is of very little value as a guide in cases of appendix trouble. We must rely upon the pulse.

With regard to the second case, I think that it is important to note that diarrhoea occurring early in a case of appendicitis often points to the presence of pus. *In every case of appendicitis a rectal examination should invariably be made.*

In every case of appendix abscess we are justified in spending some time in searching for the appendix, and endeavouring to remove it if the patient's condition be satisfactory. If we leave a diseased appendix, we never know when a fresh infection may be lighted up.

In cases of appendix abscess a posterior drain can easily be put in, and in many cases, after careful cleansing, the anterior wound can be safely closed.

An anterior drain has several drawbacks. It is in the wrong position for satisfactory drainage, and a hernia is apt to develop subsequently at the site at which drainage was employed.

The third case reminds us of a fact which we are apt to forget: that we can never safely judge of the size of an abdominal swelling by an examination through the anterior abdominal wall.

The fifth case emphasises the fact that pain over a certain place does not always indicate that this place is the site of the disease. We must make a diagnosis very often by a process of exclusion. It is also interesting to note that this patient had a perforation at some time previous to the operation, and it is also to be noted that she complained of pain in the right loin, and that the appendix was placed behind the ascending colon. Possibly the position of the appendix saved her from an acute and fatal attack at the time of the perforation.

The sixth case is an example of neglected appendicitis, which we all deplore. Had the boy's parent called in a medical man on the first day of illness, in all probability the patient would have been alive now. As it was he never had a chance given to him.

#### GENERAL REMARKS.

I am confident that the most useful guide as to the progress or otherwise of these cases of appendicitis is the *pulse*. A rapid pulse, or a pulse which is increasing in frequency is of ill omen. The temperature is of very little value as a guide compared with the pulse. I have drained a large appendix abscess, and removed a sloughing appendix, when the patient's temperature has been normal, or even sub-normal. I should lay it down as a rule to which there are no exceptions that once a patient has had a definite attack of appendicitis, that it is our duty, during the quiescent period, to remove the appendix.

In every case of appendicitis a rectal examination should be made. Well do I remember the case of a boy, æt. 12, whom I saw on the fifth day of an attack of appendicitis. His temperature was normal, but his pulse was 130. I made a rectal examination and found a large abscess. This we drained, and the boy made a rapid recovery.

It is extremely bad practice to administer opium in any form, and even in minute doses, to a patient suffering from appendicitis, unless we are prepared to operate without delay. It masks the symptoms, but, of even greater importance, it controls the circulation and destroys our most reliable guide as to our patient's condition—the pulse. We shall not stray far if, in operating upon these cases, we take "quick in, quicker out"; to mean, we must reach the appendix with all speed, and, having found it, we must remove it as quickly as we

possibly can while ensuring the safety of our patient.

The best drainage for an appendix case is the posterior drain just above the iliac crest. If we drain the wound anteriorly we are very liable to get a hernia appearing subsequently through our scar.

The operation of appendicectomy may prove the simplest we can possibly be called upon to perform, but if adhesions be present it may prove a most difficult and tedious operation, but, whatever the difficulties we encounter, it is our duty to our patient never to be dismayed, but to remove the offending organ, if we can possibly do so without risking the life of our patient. A tedious operation and a life saved is more creditable to a surgeon than an abandoned operation, resulting in the death of the patient.

With regard to the operation itself, the most useful incision is that which I have described. An incision in the middle line of the abdomen, or through the right linea semilunaris, would have been useless in Cases 2, 3 and 5.

Splitting the internal oblique in the course of its fibres is useful in straightforward cases, and I have done it on several occasions; but in cases complicated by adhesions it greatly increases the difficulty of the operation.

With regard to the treatment of the appendix, all we need do is to ligature it as near the base as possible, having tied its mesentery, and invert the stump into the wall of the cæcum by means of a purse-string suture. If we adopt this method we are sure of removing the appendix as completely as possible.

It is in cases in which the appendix is incompletely removed that we hear complaints from patients of a "return of the old pain," or attacks of appendicular colic.

## THE NEED FOR LEGISLATION IN REGARD TO ANÆSTHETICS, AND THE LINES UPON WHICH IT SHOULD TAKE PLACE. (a)

By F. W. HEWITT, M.D. CANTAB., ETC.,

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THE author submits that the importance of the anæsthetic as a factor in surgery is not sufficiently realised. A large number of deaths under anæsthesia have taken place during recent years and public confidence has been severely shaken. Many of these accidents are undoubtedly attributable to the faulty and inadequate provisions for anæsthesia which often prevail. In order to restore public confidence and to remove the present check to surgical progress certain reforms are urgently needed.

The present unsatisfactory state of the law as regards anæsthetics is dealt with. Any person whatsoever may administer a general or inject a local anæsthetic for a surgical operation. Many fatalities have thus arisen which might have been averted had a medical man been present. Our legislature should be called upon to say who should and who should not administer an anæsthetic. This is the fundamental reform required. When secured, it would unquestionably lead to the permanent establishment of the two other reforms which are needed—viz., the more thorough instruction in anæsthetics of all medical students and the better equipment, in *personnel* and otherwise, of the anæsthetic departments of our hospitals. The

question of legislation in regard to anæsthetics is part of the greater question of the suppression of unqualified practice in general, and the legislation here proposed would form a fitting instalment towards a more comprehensive measure. The chief difficulty lies in deciding where the line should be drawn—in other words in defining who should, and who should not administer anæsthetics. It is contended that no *general* anæsthetic should be administered except by a registered medical practitioner. It is also contended that this would in no way interfere with the interests of registered dentists. The new system would tend rather to raise their professional status and to free them from the present unsatisfactory and dangerous practice of single-handed anæsthetising and operating. It would, moreover, strike a decisive blow at quack dental practice, and so greatly benefit the dental profession.

The author has instituted inquiries as to the conditions of dental practice in the following towns, viz. :—

Aberdeen.	Ipswich.
Aberystwyth.	King's Lynn.
Armagh.	Kingstown.
Ballymena.	Leigh (Lancs.).
Bath.	Limerick.
Bedford.	Llandrindod Wells.
Belper.	Ludlow.
Boston.	Newton Abbot.
Bournemouth.	Nottingham.
Brighton.	Oxford.
Bristol.	Paignton.
Brixham.	Penarth.
Cardiff.	Reading.
Carnarvon.	Ryde.
Cheltenham.	Selby.
Chepstow.	Sleaford.
Deal.	Swansea.
Dumfries.	Taunton.
Exeter.	Teignmouth.
Falmouth.	Torquay.
Galway.	Tralee.
Gateshead.	Trowbridge.
Gloucester.	Truro.
Greenock.	Wick.

The following are the results obtained :—

TABLE showing conditions of registered dental practice in 48 towns scattered throughout the United Kingdom, the population of which varies between 342,388 and 1,827.

A	
Total population of the 48 towns	2,138,130
B	
Total number of registered dentists (excluding registered or qualified assistants) in practice in the 48 towns...	482
C	
Ratio between registered dentists in practice and population...	1 registered dentist to every 4,435 persons.
D	
Total number of registered dentists in practice by themselves in the 48 towns ...	352
E	
Percentage-ratio of dentists of Group D to those of Group B ...	73 per cent.
F	
Total number of registered dentists in partnership in the 48 towns ...	99

<b>G</b>		
Percentage-ratio of dentists of Group F	20.5	
to those of Group B	...	per cent.
<b>H</b>		
Total number of registered dentists in		
the 48 towns practising with regis-		
tered or qualified assistants (ex-		
cluding the latter)	...	31
<b>I</b>		
Percentage ratio between dentists of	6.5	
Group H and those of Group B...		per cent.

These statistics show that the great majority of provincial dentists have neither partners nor registered assistants, so that unless they call in medical men to administer their anæsthetics they must either themselves administer them and then operate, or obtain the assistance of persons who are quite unfit to take upon themselves such responsibilities. As it is now generally conceded (see evidence before Departmental Committee) that single-handed anæsthetising and operating is reprehensible, and that the employment of unqualified assistants, domestic servants, etc., as anæsthetists, is also to be deprecated, the only course left is that for which an appeal is here made—the administration of general anæsthetics by medical men.

Since the "General Anæsthetics Bill," now before the Departmental Committee at the Home Office, was drafted it has been found possible to modify it so as to include local (injected) anæsthetics. The following is a copy of the Bill thus modified:—

#### MEMORANDUM.

The objects of this Bill is to protect the public, as far as possible, against deaths arising directly or indirectly from the action of anæsthetics—a class of drugs or substances employed for producing either generalised or localised insensibility during surgical, medical, obstetrical, or dental operations, acts or procedures.

The three following facts indicate the need for this legislative protection:—

1. Anæsthetics are for the most part powerful poisons.
2. They are constantly being used upon a vast and increasing scale throughout the country.
3. A considerable and increasing number of fatalities are annually taking place in connection with their administration.

The promoters of the present Bill are of opinion that the solution of the problem of reducing the number of deaths wholly or partly referable to anæsthetics is to be found in a careful study of the circumstances and symptoms which have attended the deaths hitherto recorded. Such a study seems to them to indicate that anæsthetics, when employed for the above-named purposes, should be administered only by certain persons. This Bill therefore proposes to make it a penal offence for any person other than the persons herein specified to administer for the purposes above mentioned either any general anæsthetic or any local anæsthetic by the means described.

#### ANÆSTHETICS ACT, 1912.

An Act to regulate the administration and employment of anæsthetics.

Be it enacted by the King's Most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal and Commons in the Present Parliament assembled and by the authority of the same as follows:—

1. Any person other than a legally qualified

medical practitioner registered under the Medical Acts who shall wilfully administer or cause to be administered to any other person by inhalation or otherwise any drug or substance, whether solid, liquid, vaporous or gaseous, and whether pure or mixed with any other drug or substance, with the object of producing a state of unconsciousness during any surgical, medical, obstetrical or dental operation, act or procedure, or during childbirth, shall be liable on conviction before a Court of Summary Jurisdiction for such offence to a penalty not exceeding £10, and in the case of a second or subsequent conviction to a penalty not exceeding £20, provided always that a person shall not be liable to a penalty under this Section if in conducting such administration he was acting under the immediate direction and supervision of a legally qualified medical practitioner, or if the circumstances attending the administration were such that he had reasonable grounds for believing, and did believe, that the delay which would have arisen in obtaining the services of a legally qualified medical practitioner would have endangered life, or if having been registered under the Dentists' Act, 1878, before the passing of the present Act he conducted such administration for a dental operation, act or procedure.

2. Any person other than a legally qualified medical practitioner registered under the Medical Acts who shall inject, insert or introduce, or cause to be injected, inserted or introduced into any tissue or tissues of the body of any other person through a puncture, incision or other breach of surface, any drug, medicament or substance, whether solid or liquid, and whether pure or mixed with any other drug, medicament or substance, with the object of producing a state of localised insensibility to pain without unconsciousness during any surgical, medical, obstetrical or dental operation, act or procedure, or during childbirth, shall be liable on conviction before a Court of Summary Jurisdiction to a penalty not exceeding £10 and in the event of a second or subsequent conviction to a penalty not exceeding £20, provided always that a person shall not be liable to a penalty under this Section if in attempting to produce, or in producing, such localised insensibility he was acting under the immediate direction and supervision of a legally qualified medical practitioner, or if being registered under the Dentists' Act, 1878, he attempted to produce, or did produce, such localised insensibility for the performance of a dental operation, act or procedure, or if, being a *bonâ-fide* student in dental surgery or dentistry, and acting under the immediate direction and supervision of a person registered under the Dentists' Act, 1878, he attempted to produce, or did produce, such localised insensibility for the performance of a dental operation, act, or procedure.

3. The expression "Court of Summary Jurisdiction" in this Act shall have the same meaning as in Sub-Section 11 of Section 13 of the Interpretation Act, 1899. In Scotland it shall mean any Justice of the Peace, and also the Sheriff. The expression "the Medical Acts" shall mean the Medical Act, 1858, any Acts amending the same passed before the passing of this Act.

4. This Act may be cited as the Anæsthetics Act, 1912.

LAST week it was stated at a meeting of the Stepney Council that two or more cases of small-pox had occurred in the borough of Stepney. The newly infected persons were the sister and brother-in-law of the man Gaffney, who was discovered with the disease in Whitechapel, and afterwards died. They were removed to the small-pox shelter, and were not allowed to come in contact with other persons.

## QUACKS, FALSE REMEDIES, AND THE PUBLIC HEALTH.

By DAVID WALSH, M.D.ED.,

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### PART V.

#### AN AMERICAN BOOK ON QUACKS AND QUACKERY. (a)

IN the United States the question of secret remedies has been taken up with vigour. The American Medical Association recognises the good faith of some proprietary medicines. In February, 1905, a Council on Pharmacy and Chemistry was formed to investigate the subject. Numerous analyses of many secret remedies were made, and reports published dealing with claims to cure, therapeutic value, cost, composition, and other pertinent matters. These reports have been reprinted in a small octavo volume, of rather under three hundred pages. They form a valuable mass of evidence.

The American book deals with a number of nostrums not included in "Secret Remedies." It treats everything with unsparing frankness. Those who require any information as to the Viavi remedies for female troubles will find a fairly full notice in its pages. That particular method, with its various medicaments, appears to have originated in California, and thence, after the fashion of such things, to have spread to other quarters of the globe. In the United Kingdom Viavi is lectured upon to women, and advertised in some of the larger towns.

#### THE INLAND REVENUE.

One of the cruelties of the traffic in secret medicines is the use of alcohol. In this way it may lead man, woman, or child to acquire a drug habit, and at the same time inflict all kinds of damage to brain, kidneys, liver, and other internal organs. A more striking example of callous contempt of right-mindedness it would be hard to find than that afforded by the sale of whisky to teetotallers as "tonics" and of strong dilutions of ardent spirit to drunkards under the guise of "drink cures." A common abuse is that of sham "tonics" composed of Taragona port or other wine, compounded with various meat essences, extractives, and so on. The Inland Revenue might interfere in all alcoholic secret medicines with considerable effect, inasmuch as their action would reveal the true nature of the wrong that has been perpetrated not only upon the public, but also against the national revenue. In Canada, where effective steps have been taken against both abuses, the subject of patent medicines has been investigated in the laboratory of the Inland Revenue Department, Ottawa. Mr. Thomas Macfarlane, Chief Analyst, in the course of a report (b) to the Deputy Minister of Inland Revenue, January 9th, 1906, Bulletin 3, says of "Peruna":—"From the small percentage of total solids contained in this article, less than is found in ordinary rye or Scotch whisky, it does not appear to belong to the class of patent medicine. The quality of alcohol found in it (40 per cent. proof spirit) is considerably higher than the strongest port wine, and about two-thirds that of the ordinary grade of whisky. It becomes a question whether it could be legally sold by druggists without a liquor licence. In the *New Hampshire Sanitary Bulletin* of the present month it is stated that an order has been issued by the Commissioner of Internal Revenue, Treasury Department of the United States, requiring dealers in certain patent medicines to pay a revenue tax as liquor dealers." A list of proprietary preparations follows, and of these Mr. Macfarlane says:—"These preparations contain so small an amount, if any, of effective drugs or medicines, and so large an amount of alcohol, as to make their use as intoxicants not uncommon."

Here, then, we find in an existing organisation a

(a) "The Propaganda for Reform in Proprietary Medicines." Reprinted from *The Journal of the American Medical Association*. New York. Fifth Edition. September, 1908.

(b) "Australian Report," p. 109.

powerful means of attacking one of the deadliest and most insidious of secret remedies. Armed with an analysis showing the alcoholic and other ingredients (or lack of ingredients) of a remedy of this kind, it should not be a matter of any great difficulty to induce some member of Parliament interested in temperance questions to ask a question in the House about the incriminated preparation, and in that way to reveal its true nature not only to the public, but also to the Inland Revenue authorities.

#### THE FOOD AND DRUGS ADULTERATION ACT.

IN some instances where it can be shown that the vendors of patent medicines have failed to use the drugs that are named in their advertisements, they would probably lay themselves open to prosecution under the Food and Drugs Act. In the above-quoted Bulletin No. 113 of Mr. Macfarlane, he writes of "Ozone":—"Since this article contains a substance whose properties are the opposite of those indicated by the name, its sale would appear to be illegal under Section 2 of the Adulteration Act, according to which a drug shall be deemed to be adulterated 'if its strength, quality, or purity falls below or differs from the professed standard under which it is sold or offered for sale.'"

That something can be done, however, under the British Food and Drugs Act has been shown by Dr. Hope, the Medical Officer of Health for Liverpool. He obtained a conviction in the case of a patent medicine vendor who sold a nostrum as a specific cure for liver complaints. This so-called remedy he showed to consist of an acidified solution of glycerine worthless for the purpose mentioned, therefore sold to the detriment of the purchaser. His successful prosecution under the Food and Drugs Act suggests that Medical Officers of Health might exercise a great amount of control generally over the trade in secret remedies. Dr. J. C. McWalter (a) insists on the importance of Dr. Hope's precedent, which, coupled with the published analyses of the British Medical Association, should induce local Councils to prosecute persons selling worthless articles as cures for diseases. Then medical officers of health could testify to the worthlessness of the preparations and the purpose for which they were sold.

Dr. McWalter holds that the solution of the quack medicine problem is to be found in compelling the makers of nostrums to set forth the ingredients on the label. His remarks on the attitude of the British Government, which last year received some £340,000 from the Inland Revenue stamps upon patent medicines, put the case with strong and vigorous rhetoric.

"The concurrence of the Government (b) in this traffic," he writes, "has become a national scandal. No other reputable legislature on earth has consented to take from quack medicine vendors what may be described as the 'wages of sin.' There is, indeed, a small tax in the United States on proprietary articles, but as their composition must be set forth on the label, the money may be considered as comparatively untainted. The Government of France tolerates no quack remedies—home or foreign; the ingredients must be made known to the public. The German Government have even a stricter rule. Were our flourishing quack medicine makers, who take over £2,000,000 per annum from the sick and ignorant, and pay £340,000 to our Government, to attempt to carry on their calling under like conditions in Italy, or even Russia, the police and the gaol await them."

#### THE CHILDREN ACT, 1908.

Dr. A. G. Bateman has drawn attention to the fact that it is possible to proceed indirectly against irregular practitioners who have treated children under the age of 16 years. The Children Act, 1908, Section 12, renders it a misdemeanour for a parent or other person legally liable to maintain a child (c) or young person (d) who shall be deemed to have

(a) "How to deal with the Quack Medicine Traffic." By J. C. McWalter, M.A., M.D. *Medical Press and Circular*, September 22nd, 1909.

(b) *Loc. cit.*, p. 318.

(c) "Child" defined for purposes of Act as under 14 years.

(d) "Young person," 14 to 16 years.



neglected him in a manner likely to cause injury to his health if he fails to provide adequate food, clothing, medical aid, or lodging for the child or young person. The misdemeanour is punishable under the Act on conviction on indictment to a fine not exceeding £100 and imprisonment up to two years, or on summary conviction to a fine not exceeding £25, or six months' imprisonment. Should it be shown that the parent or guardian is directly or indirectly interested in money accruing from the death of the child or young person, the punishment on conviction is much heavier. Again, should the child or young person die, the parent or other guardian is open to a prosecution for manslaughter.

The bearing of this upon quacks and quackery is clear. Any parent or guardian of any child or young person is liable to smart punishment if convicted for having failed to provide adequate medical aid, demanded by Section 12 of the Act. It is hardly conceivable that any magistrate would regard the advice of an unqualified person as falling under that head. Nor is it likely that the prescription of a chemist, despite his knowledge of drugs, would fall within the definition of "adequate medical aid." Then comes the further point that any person giving unqualified services in such a case would become an accessory to a misdemeanour or a felony, and therefore open to prosecution. In this way it would be possible to prosecute the whole tribe of bonesetters, herbalists, bogus oculists, and others—indeed, of all quacks incautious enough to treat any person under 16 years of age. It may sound somewhat harsh to mention in this connection chemists, who form a skilled and honourable class of men. Nevertheless, it is evident that if, by reason of good nature or inadvertence, a chemist were to prescribe certain physic for the use of a young person, he might find himself involved in extremely unpleasant consequences.

Another strong point in the Children Act is the provision in Clause 6 that in the case of any person who has taken charge of an infant he is to give notice in writing of the death within 48 hours. Unless a certificate signed by a duly qualified medical practitioner is forthcoming, the coroner is required to hold an inquest upon the body, unless satisfied that there is no ground for such an inquiry. A proper observance of this clause would probably render parents and guardians less likely to resort to quacks and quack medicines for their ailing children. This section should be known by all resident medical officers at hospitals and other medical charities. It is a common practice to bring babies and children who have been neglected or treated with quack remedies to a hospital once or twice, and then, in case of death, to apply for a certificate. A rigid rule should be observed in all medical charities that no death certificate should be signed in the case of any patient who has not been under treatment for at least a week. A rule of that kind is strictly kept by almost all medical practitioners. It is obvious that the bringing of a large number of cases of infant deaths under the notice of the coroners would enable the latter to acquire a mass of accurate information as to illegal medical practitioners and the effects of secret remedies administered to infants. By keeping in touch with the police, coroners might do a great deal under the Children Act towards the suppression of quacks and quackery.

#### THE PHARMACEUTICAL SOCIETY.

The Pharmaceutical Society was established in 1841. There have been five Pharmacy Acts between 1852 and 1908 which have given them powers of examining and registering. The functions which concern the present inquiry are the Society's right (a) to institute proceedings against sellers of poisons, and (b) through His Majesty's Order in Council to vary poisons schedule.

(a) The right of the Pharmaceutical Society to prosecute sellers of poisons apparently furnishes a powerful weapon of attack upon patent medicine vendors who use certain recognised poisons in their proprietary medicines. The Society can now gain authoritative information as to many of these preparations from the books published by the British Medical and the American Medical Associations ("Secret Remedies"

and "Propaganda for Reform" respectively), and from the "Australian Report."

(b) As regards the poisons schedule, would it be feasible for the Pharmaceutical Society to extend—or take steps to extend—the poisons schedule so as to add certain drugs to the list so far as patent and proprietary medicines are concerned? If it be shown, for instance, that colchicine is sold in certain pills to "correct" female troubles, and that its action as a cumulative poison is highly dangerous, could not the sale of that drug in that form be made the subject of prosecution? Again, calomel is a dangerous poison in the case of children, and is extensively sold in the form of "teething powders." Would it not be possible to schedule calomel as a poison in secret remedies, and proceed against those who sell it hereafter?

If this principle be once established, its extension to acetanilide, opium, morphia, and many other poisons would aim a deadly blow at the most injurious portion of the quack medicine trade.

#### THE BRITISH MEDICAL ASSOCIATION.

The most powerful organisation hitherto created amongst medical men is that of the British Medical Association. During the last few years the evolution of that body has been proceeding at a rapid pace. It is needless to dwell upon the many ways in which they might help the campaign against quacks and quackery. Such steps as advisory representations to the General Medical Council, pressure upon corporations to exercise their powers in particular cases, appeals to Government for the amendment of defective Acts, and the like, are sufficiently obvious. Coming from the representative organisation of the majority of the medical profession, their opinions could not fail to carry weight with any official body.

It would be, perhaps, possible for the Association to co-operate with the Society of Apothecaries in the prosecution of unqualified practitioners, and to defray a part of the cost of such proceedings out of the funds of the Association.

#### THE SOCIETY OF APOTHECARIES OF LONDON.

The Society of Apothecaries of London dates, as a licensing body, from James I., in the year 1617. The original Charter gave them the power to "remove or prohibit" persons practising unsatisfactorily as apothecaries without their licence. Under the Apothecaries Act, 1815, they can and do from time to time prosecute unqualified persons who infringe the privileges of the apothecary. Bonesetters appear to be outside the Society's jurisdiction. Herbalists have sometimes met their prosecution with a defence already mentioned, raised under a statute of Henry VIII., not yet formally repealed, which granted to them certain privileges with regard to sundry specified diseases. It would be an advantage to the public were the General Medical Council to carry to appeal, should occasion arise, the question whether the Act of Henry VIII. is still operative or otherwise.

The statute above alluded to, is thus spoken of in the first "Medical Directory," (a) published in 1845:—"By Statute 34 and 35, Henry VIII., c. 8, unlicensed persons may use and minister on and to any outward sore, income wound, apostumations, outward swelling or disease, any herb or herbs, ointments, baths, pultures or emplaisters, according to their cunning, experience or knowledge in any of the diseases sores and maladies aforesaid, and to all other like to the same, in drinks for the stone, strangury, or agues, without suit vexation trouble penalty or loss of their goods, the foresaid statute in the foresaid 30th yeare of the King's most gracious reign or any other Act notwithstanding."

With respect to this statute, Lord Chief Baron Comyns says (in his "Digest title Physician D.") that it "enables only to make application to external sores," etc., not internal; and in Le Colledge de Physicians' case, Littleton's Reports 349, Lord Chief Justice

(a) "The New Directory of Great Britain and Ireland for 1845," Published at Medical Directory Office, 272 Strand, Oliver and Boyd Edinburgh; Fannin and Co., Dublin; and by all booksellers.

Richardson, in delivering the judgment of the Court of Common Pleas, says that "this statute reaches neither in word, nor in intent and meaning to give liberty to any person that practises or exercises for lucre or profit, so that this statute excludes all those who take any money or gain."

This last-mentioned ruling seems to be of importance in view of the defence set up by herbalists and others. It apparently shows that if any money is paid to the unqualified person he cannot avail himself of the statutory right conferred by 34 and 35, Henry VIII.

The Apothecaries Act appears to give ample powers for the suppression of quacks. Presumably, also, it is able to put a stop to the sale of medicines for the cure of disease by unauthorised persons. The costs of prosecutions no doubt usually falls upon the Society, which can hardly be expected to undertake wholesale proceedings of the kind. Were the State to find the money for legal process under the Apothecaries Act, there would be little need of fresh legislation.

The writer has been reminded by a legal friend that recent legislation has rendered it possible for magistrates to give costs in cases of this kind. This fact may encourage the Society to increase the number of prosecutions.

#### TREASURY PROSECUTIONS.

The "Australian Report" (p. 365) comments upon the "First and only prosecution of the British Treasury," that is to say, of a quack. On September 21st, 1906, William Henry Hawkins, 62, and his son were charged on a Treasury warrant with conspiring by false pretences to obtain money and valuable securities from such of His Majesty's subjects as should thereafter purchase from them certain powders. Their circulars included a biography, written by the elder Hawkins, of the Rev. Joseph Hook, telling how he discovered the wonderful powers of the medicine known as "Corassa Compound" from a priest in South America. The compound was said to consist of four drugs: "Corassa abinus, selarmo umbertifera, alkernes edifolia, and karsadoc herbalis." This medicine was said to cure forty-seven diseases. Other remedies, discovered by other clergymen, were circularised under the name of the Rev. Mr. Stone. Analysis showed the powders to consist of a mixture of bicarbonate of soda and bromide of potassium. The trade cost of twenty-five powders was about one penny. That number of powders was sent by accused at a charge of 18s. 6d., and it was stated that a chemist would charge 28s. for making up these powders. The prosecution against the younger Hawkins was withdrawn, but the father was found guilty.

The judge, in passing sentence of three months' imprisonment with hard labour, said that he looked on it as a sort of test case, and he wished the Treasury every success in taking up cases of that kind. A great and good work would be done by stopping the sale of quack medicines.

The Australian Commissioner makes some caustic comments on the result of this trial. "Can anyone claim," he asks, "that the judicial perception of right really accords with the desires of the British people? Four years' for stealing a skirt, two years' for snatching a hand-bag, seven years' for embezzlement, five years' for stealing ducks, as against three months' for issuing—uttering—200 to 500 actual forgeries a day, and carrying on the practices for ten years at least. Hawkins made 'considerable sums of money' by proven fraud against the lives and health of the public, especially against persons suffering from contagious sexual diseases, so that wide personal and racial damage was done. Three months' confinement for these multitudinous infamies! No wonder, when such is the proper punishment, according to the judicial estimate, that this was the first and only prosecution by the Treasury."

As a matter of fact, the prosecution of Hawkins had been demanded by the *Lancet* ten years before his actual trial. What can be the candid feelings of newspaper editors who for all that period inserted the felonious advertisements whereby this impersonator of clergymen was enabled to defraud the public with his worthless nostrum?

From what has been said, it is clear that there are in existence many ways in which both false practitioners and false and secret remedies may be checked and controlled. It is to be hoped that the General Medical Council, faced with the failure of the penal section of the Medical Act of 1858, will ascertain the exact legal position both of the Council and of other bodies with regard to their powers against quacks and quackery.

#### SUMMARY AND CONCLUSION AS TO EXISTING METHODS OF CONTROL.

The real want is a Public Prosecutor or a Department that would put into force some of the many existing laws that can be brought to bear upon the unqualified practice of medicine and the sale of injurious secret remedies. Were the police to take up zealously the prosecution of offenders under the Children, the Death Certification, the Adulteration, and other Acts, and generally of obtaining money under false pretences, a great deal of good would be effected. The chief defect in the application of various existing laws to suppress the evil of quackery lies in the want of a zealous prosecuting authority and of a means of defraying the cost of prosecution. Were the legislature bent on suppressing quacks, as they suppress or punish burglars, they would find plenty of ways and means in the law as it stands. For instance, by paying the costs of prosecutions under the Apothecaries Act, it is possible that the State might practically put an end to irregular medical practice. At the same time, their hands might be greatly strengthened by certain legal and administrative reforms, which suggestions will be dealt with in our next and concluding section.

#### HOW TO DEAL WITH QUACKS AND SECRET REMEDIES.

##### RECOMMENDATIONS.

##### PUBLICATION OF FORMULA.

The stronghold of the secret medicine vendor is secrecy, and anything that does away with that condition will deal him a death blow.

The publication of the formula of the contents of every secret remedy, its attachment to every package or bottle, and its appearance in every advertisement, is an obvious step on the part of any legislature desirous of checking the evil.

Publication is the rule in Germany and other countries, and has been found to work well enough. It would not damage the respectable proprietary manufacturer, who already in many cases publishes the full formula of his preparation. He is content to copyright his title and to look for his reward in the sale of a good article with the approval of the medical profession.

##### ABOLITION OF THE PATENT MEDICINE TAX.

The patent medicine stamp should be abolished. In the eyes of ignorant persons it undoubtedly suggests a guarantee from the Government as to the good qualities of the article to which it is attached. By accepting a money payment the Government are to a great extent hampered in prosecution when fraud is revealed. Nay, it is a fact that the Government stamp is still fixed upon articles that have been publicly proclaimed to be fraudulent by His Majesty's Judges in open Court. The Australian Report has exposed a mass of fraud, chicanery, damage to the public health, and criminal practices in connection with patent medicines. Yet the British Government are being paid for their protection to not a few of the false remedies thus exposed. The British revenue benefits to the extent of a few hundred thousand pounds (a) yearly from patent medicine stamps. As a matter of fact, the money comes from the pockets of the deluded customers, so that the State is actually making money out of this nefarious trade. So accustomed have the Government grown to this source of revenue that we may be thankful that there has been no attempt to

(a) Revenue from patent medicine stamps £268,000 in 1907: £334,000 in 1908.

extend the tax during the recent deficits in the national Budget. The attitude of the average statesman towards the patent medicine stamp duty may be gauged from the answer given by Mr. Herbert Gladstone on September 16th, 1909, to Captain Craig. In his answer the Home Secretary practically promised the appointment of a Select Committee in the following session to inquire into the sale of patent medicines. This important announcement was made in response to Captain Craig's question: "Whether the Home Secretary would consider the advisability of issuing regulations making it compulsory on all manufacturers of medicines liable to patent medicine duty to print on the label on the bottle or other vessel in which such article is sold the full ingredients of such bottles or vessels, as well as the diseases they purport to cure; whether he would consider the advisability of increasing the size of the lettering of the Government stamp as a further precaution against ignorant people believing that the contents are guaranteed by Government." In his reply Mr. Herbert Gladstone said "he was in communication with the Privy Council with reference to the first part of the question, and he was disposed to think the matter of sufficient importance to require an inquiry by a Select Committee next session. New designs for stamps and labels had recently been adopted, and were being prepared, which would clearly indicate that the stamp did not imply a Government guarantee."

Here we have a leading statesman acknowledging in the Commons that the State is ashamed of the wares from which this mean and paltry duty is taken.

From an economic point of view the paltry sum of money raised for the revenue from the patent medicine duty must represent an enormous trade in false remedies that in the long run inflict incalculable damage upon the health and the lives of the nation.

The probability is that the cost to the public of stamped nostrums must be somewhere between two and a half and three and a half millions yearly.

The abolition of the patent medicine duty is one of the first duties of a Chancellor of the Exchequer who has the national welfare at heart, and who wishes to draw his revenue from sources that are wholesome and untainted.

#### A ROYAL COMMISSION.

One of the best methods of gaining a thorough knowledge of the facts of the case and of educating the public thereon is undoubtedly by way of Royal Commission, with full power of summoning witnesses and of otherwise obtaining information. That plan has been adopted with extraordinary success by the Commonwealth of Australia, which is flooded with quacks and quackery of the same pernicious kind that devastates the British Isles. Recognising the advantages of this step, the General Medical Council have lately petitioned the Privy Council in favour of a Royal Commission upon irregular medical practice. Such an inquiry, however, would be of little use were it to exclude secret remedies, which, in point of fact, constitute one of the most deadly and injurious forms of false medical practice. That fact was fully realised by the sturdy logic of King Henry VIII., whose charter created a College of duly qualified medical men on the one hand, while on the other he conferred on that body the duty of suppressing false practices and false drugs by powers of a summary kind. A Royal Commission, then, if it is to fulfil its functions adequately, must investigate the sale of secret remedies as a part of the larger question of irregular medical practice.

#### HOW TO SOLVE THE PROBLEM BY EXISTING LAWS.

Since the stalwart days of Henry VIII. there has been little or no efficient legislation against quacks and quackery, save a pious affirmation of the powers of the Royal College of Physicians of London in various reigns up to the year 1860. The restraining powers have been in existence, as regards London, for nearly 400 years, but have been poorly applied. The Medical Act, 1858, which, under Section XL., should have extended similar penal powers to the whole Kingdom, has proved a failure, not so much on account of its inherent weakness, as of the interpretation put upon the Section by magistrates and judges. As

regards this particular kind of legislation, indeed, there appears to be a peculiar leniency in legal administration, and on that account alone it would be wise to make use as far as possible of existing laws, short of the attempt to secure fresh legislation. If, as sometimes contended, the penal powers of the London College of Physicians of London, or of any other bodies, were superseded by the creation of the General Medical Council in 1858, it becomes all the more incumbent upon the latter body to take steps to render those powers effectual. Fortunately, there are many legal methods by which quacks and quackery may be directly and indirectly attacked. These methods have, for the most part, been already discussed, so that there will be little need in conclusion to do more than append a list of the author's recommendations with a note here and there of important details.

#### RECOMMENDATIONS.

##### TO INSTITUTE

1. A Royal Commission upon unqualified medical practice, including secret cures and remedies.

##### TO ENFORCE

2. The Children Act, especially as regards the duty of obtaining adequate medical aid for infants and young persons.

3. The statutory duties of the Royal College of Physicians of London as regards London and a compass of seven miles round, if it can be shown that they are still in existence, as regards false medical practice and false drugs and remedies.

4. The administration of Excise and Inland Revenue as regards patent and proprietary medicines.

5. The various powers of coroners, police, registrars, and Public Prosecutor with regard to the evil practices of quacks and the injurious results of secret cures and remedies brought under their official notice.

6. The penal powers of the Society of Apothecaries of London against unqualified practice.

7. The powers of the Pharmaceutical Society against unqualified pharmacists and the scheduling of poisons sold in proprietary and patent medicines.

##### TO ABOLISH

8. The patent medicine stamp duty.

##### TO AMEND

9. The Poisons Act, so as to extend the poison schedule, and apply a prominent poison label to all secret remedies containing one or more of the drugs so scheduled. If deemed advisable, also to create a special extension of the poison schedule, to be applied solely to proprietary and patent remedies.

Further, to forbid absolutely the sale in secret remedies of certain potent drugs, which should never be prescribed except under skilled medical authority and supervision. Also to provide that the word "poison" affixed to any label shall be in conspicuous red letters.

10. The Food and Drugs Acts to be amended so that patent medicines are brought explicitly within the provisions directing that a vendor shall supply materials dealt with by the Act of the nature, quality, and substance demanded by the purchaser, and proposed to be sold by the vendor.

11. The Medical Act, 1858. The Act might be greatly strengthened so far as the suppression of quacks and quackery is directly and indirectly concerned:—

(a) By increasing the number of directly-elected representatives of the medical profession on the General Medical Council.

(b) By causing the nominees of the various universities, colleges, and other medical corporations to be in all cases elected by the holders of their respective degrees and qualifications.

(c) By amending Section XL. on the general lines that the public should be protected against unqualified medical practice not less efficiently than they are against unqualified dental, veterinary or legal practice, and more particularly by omitting the condition that in order to secure conviction the accused person must be shown to have "wilfully and falsely" pretended to be or have taken the name or title of a physician, etc.: in other words, to constitute medical practice by an

unqualified person a punishable offence in itself, apart from any personal knowledge that he is committing an offence.

(d) By the substitution or addition of the principle as regards Section XL. that it is illegal for an unqualified person to exercise or discharge any act essentially appertaining to qualified medical practice.

(e) By granting summary powers to recover fines and costs upon conviction under Section XL.

12. The Apothecaries Act, 1815, so as to confer summary powers of recovering fines and costs from offenders upon conviction.

It is to be hoped that the Legislature will recognise and put a stop to the evil that is wrought upon the community by unqualified medical practice. The statesman who undertakes to sweep out this Augean stable will find himself faced with no light task. Owing to the attitude of the newspapers, he would find that the case can be adequately established only by means of a Royal Commission, whereon the main body of the medical profession was duly represented. On the other hand he would probably recognise that, by a wise amendment and consolidation of existing laws, Parliament would avoid the necessity of fresh legislation to put an end to the evils inflicted upon the nation by false medical practice and by the sale of secret remedies.

## CLINICAL RECORDS.

### A CASE OF ACCIDENTAL VACCINATION— WITH PHOTOGRAPH OF THE PATIENT.

By RANDAL HERLEY, B.A., Roy. Univ.,  
IRELAND, L.R.C.S., L.R.C.P., EDIN.,  
House Surgeon, General Infirmary, Dewsbury.

MRS. S., æt. 22, was admitted on June 6th, 1909, suffering from swelling of the left upper eyelid and sores on the right nipple. She had never been vaccinated.



On May 13th, 1907, the patient was delivered of a child, which she suckled until May 9th, 1909. The child was vaccinated on May 19th. On

June 1st, Mrs. S. noticed some sores on her nipple; she spoke to her mother about them, who remarked, "they are very like vaccination marks." On June 2nd the left upper eyelid began to swell; the patient complained of pain, and was unable to open the eye. The left side of the face was swollen.

On admission her temperature was 101, and pulse 90. There were three typical vaccine pocks on the right nipple; the glands in the right axilla were enlarged and tender. There was considerable swelling of the eyelid and chemosis. On the margin and outer surface of the eyelid, close to the inner canthus, there was an ulcer with a greyish floor and hard border. The cornea was clear. The eye was treated with boric acid lotion and fomentations. Mrs. S. was made an out-patient on June 17th. The ulceration was confined to the eyelid. I saw this patient quite recently, and beyond a slight thickening of the skin and loss of the eyelashes at the affected part, very little can be seen.

## OPERATING THEATRES.

### ROYAL FREE HOSPITAL.

PISTOL SHOT WOUND OF THE ABDOMEN.—MR. WILLMOTT EVANS operated on a woman, æt. 54, who had been admitted with a bullet wound of the abdomen. She was walking past a public-house about two hours before the operation, when the door suddenly opened and a man ran out. He was followed closely by another, who fired with a revolver at the first man. The patient was between the two, and received the bullet in the abdomen. She was at once brought to the hospital, suffering from a little shock and more fright. The bullet wound was found on the left side of the abdomen, above a line drawn vertically upwards from the middle of Poupart's ligament and on a level with an inch above the umbilicus. A second bullet wound was found at an almost corresponding position on the right side. She was at once admitted, and as it was impossible to tell whether a viscus had been injured or not by the bullet in its transit through the abdomen, it was resolved to explore. The abdomen having been cleansed, and the patient having been anaesthetised, it was opened in the middle line above and below the umbilicus, and the bowels examined. Immediately behind the abdominal wall, and on a level with the bullet wounds, lay the transverse colon, and on its anterior surface near the middle was a slight longitudinal groove just perforating the peritoneum, but hardly injuring the muscular coat. Two Lembert's stitches were put in the peritoneum of the bowel so as to close in the wound. The bowel was then replaced. No injury of any other abdominal viscus was discovered. The tracks of the bullet were examined; no bleeding was present. Their internal openings were closed; no stitches were placed in the bullet wounds of the skin, as they were so minute; the abdominal wound was sutured and dressed, and the patient put back to bed.

Mr. Evans said that not many years had elapsed since a surgeon was averse to opening the abdomen in cases of bullet wounds unless he felt sure that some viscus had been injured, and this practice extended to the period after the introduction of antiseptic surgery; it was true that a certain number of bullet wounds of the abdomen heal and the patients recover, even though no operation is done, though it was certain that the bullet had entered the abdominal cavity, especially when the projectile has been a small bore bullet of a modern rifle or revolver. The proportion of recoveries is, however, small, and it is nowadays always advisable to explore in cases of bullet wounds of the abdomen, unless it is absolutely certain that the bullet has not entered the abdominal cavity, and on this point it is very difficult to be certain except in

cases where the wound is very superficial. To account for the recoveries in cases where no operation has been performed it has been suggested that a small bullet may perforate a piece of bowel and yet through contraction of the opening or the plugging of it by eversion of mucous membrane no extravasation may occur, and no peritonitis may follow. Whether this ingenious explanation is correct or not, it would be absurd to trust to the possibility of such a thing happening, and there can be no doubt that the safest plan is, as he had before mentioned, to explore all bullet wounds of the abdomen. In the present case the prominence of the abdomen made it practically certain that the bullet, even in passing straight from one aperture to the other, had entered the abdominal cavity; therefore, it was thought not advisable even to probe the wound. The two openings were very similar in appearance, but it was clear which was the aperture of entrance and which of exit, for the aperture of entrance had bruised edges, and it was slightly smaller than the aperture of exit, the edges of which were slightly everted, and the testimony of the patient corroborated that she had been wounded on the left side.

The wound of the transverse colon was about as slight as it possibly could be, and in all probability it would have healed completely, even if no operation had been performed, though it is not unlikely that the surface which had been denuded of its peritoneum would have become adherent to the abdominal wall. Though this case illustrates the fact that a bullet may penetrate and traverse the abdominal cavity without causing any lesion that would prove fatal, yet the operation was fully justified and the risk incurred by it was extremely small.

The patient rapidly recovered, no symptoms appearing at any time. The stitches were removed at the end of ten days, and the patient left the hospital well twenty days after the injury.

## TRANSACTIONS OF SOCIETIES.

### THE ROYAL SOCIETY OF MEDICINE.

#### OBSTETRICAL AND GYNÆCOLOGICAL SECTION.

MEETING HELD THURSDAY, OCTOBER 14TH, 1909.

The Presidential Address was delivered by Dr. MACNAUGHTON-JONES, on  
PAIN ASSOCIATED WITH DISORDERS OF THE FEMALE  
GENERATIVE ORGANS.

Dr. CHAMPNEYS proposed that the thanks of the Section be given to the President for his eloquent address, and that he be asked to allow it to be printed.

Mr. W. D. SPANTON said he seconded the resolution of a vote of thanks to the President with the utmost pleasure. They had listened to a most interesting and suggestive address, the outcome of the ripe experience of Dr. Macnaughton-Jones, graced with that charm which always characterised him. Philosophers have told us there is no such thing as pain, but the President had clearly shown how pain may exist without any tangible physical change, while tissue changes of the gravest character are found where pain has never been felt. Mr. Spanton thought it well that our attention should be directed to these well-known facts in the delightful manner it had been that evening.

Dr. J. CURTIS WEBB, M.B., B.C., read a paper on  
THE USE OF INDICATIONS FOR ELECTRO-THERAPY IN SOME  
GYNÆCOLOGICAL AFFECTIONS.

He remarked that in the treatment of gynæcological affections by electro-therapy different types of currents must be employed to produce different therapeutic effects. A rapidly interrupted induced current produces a sedative effect, and is useful in neuralgic conditions. A current with slow interruptions should be used to tone up relaxed muscle. When bare metallic electrodes are used, they produce their action by ionisation of the metals; local effects are produced, and the result will vary with the valency and composition of the electrodes. Thus a positive zinc electrode amalgamated with mercury has a strong antiseptic action.

Metallic ions are driven in, and the acid radicles of the body fluids being attracted, exercise a cauterising and hæmostatic effect. If the electrode be negative, the basic components of the body fluid are drawn out, producing a solvent or congestive effect. When the electrodes are covered by non-metals, such as wool, there is no ionisation of metallic particles, and so no local effect is produced.

The causes of the metabolic effect brought about by interpolar action were mentioned. The author considered that treatment by static electricity is of great value in certain cases, more especially when a general rather than a local effect is desired. The methods of obtaining and controlling currents, and the various types of electrodes to be used, were next described. In inflammatory diseases of the vagina or vulva, copper or zinc ionisation, used in addition to ordinary methods of treatment, were of great value, and he described a special electrode suitable for these cases. Methods of treating amenorrhœa, scanty menstruation, and dysmenorrhœa, were also mentioned. In inflammatory affections of the uterus brilliant results may be obtained by zinc mercury ionisation, which will probably largely take the place of curettage. Much may be done for simple inflammatory diseases of the tubes and ovaries. As a rule, in these cases a course of abdomino-vaginal applications should precede intra-uterine treatment. Brief notes were given of a series of cases exemplifying these methods of treatment.

In a discussion which followed, Mr. SPANTON expressed his surprise that, in discussing the different forms of electric treatment in gynæcology, no mention had been made of the name of Dr. Apostoli, who certainly deserved credit for being one of its chief pioneers. He (Mr. Spanton) had adopted his treatment in cases of uterine myoma with hæmorrhage, with most excellent results, 20 years ago, but found the method somewhat cumbersome and difficult to carry out in hospital practice, and expensive and tedious in private patients, and these were probably the chief reasons why it has somewhat fallen into disuse.

Dr. AMAND ROUTH said the Section was indebted to Dr. Curtis Webb for bringing before them some electro-therapeutical methods of dealing with gynæcological troubles in women who were averse to "operations," or were for some other reason unable to be dealt with in the usual way. Some years ago, when he had more time, Dr. Routh adopted the methods advocated by Apostoli, and he had found real benefit from the use of the positive intra-uterine pole with a current of 60-120 milliampères in cases of uterine hæmorrhage due to "endometritis" or fibroids or subinvolution. He felt, however, that the time, trouble and expense of the treatment was not justified by the results obtained as compared with those following ordinary methods of treatment. In severe cases of chronic subinvolution and endometritis curettement was preferable, and accomplished much more than mere removal of hypertrophic mucosa as suggested by Dr. Webb, for it led to radical changes in the fibromuscular tissues of the uterus, promoting absorption of inflammatory exudations, lessening bulk, and, generally speaking, restoring the uterus to its normal size and function. Fibroids were only symptomatically cured, and the cure was only permanent when near the menopause. He felt more inclined to believe that the treatment of fibroids by X-rays, as advocated by Albers-Schönberg would cause their atrophy and cure much more effectually than the electrical treatment, even if associated with ionisation, as carried out by Dr. Webb. The fact that Graafian follicles had been proved to disappear from rabbits' ovaries in twelve days, and that sterility had been proved to follow the use of X-rays, and that rapid shrinkage of fibroids and cessation of hæmorrhage in women had been observed by Crabbe and Caldwell, of New York, led us to hope that we were on the eve of finding some reliable method of treatment as an alternative to hysterectomy.

He believed also in the germicidal action of high frequency currents in septic pruritus pudendi, and would be glad of an opportunity of trying it by means of a glass intra-uterine electrode in a case of septic puerperal endometritis. He hoped that in time the



cases which gynecologists could safely and hopefully hand over for treatment to their colleagues in the X-ray and electrical departments of medicine would become defined, for there was abundant room for any remedies which could take the place of radical operations.

Dr. HERMAN STEDMAN said that he had selected some half-dozen cases of chronic endometritis and cervical catarrh, and had endeavoured to cure the discharge by means of ionisation with zinc and copper, but that after six treatments of 600 milliampères-minutes had only in one instance succeeded in effecting a cure. The dose used was the standard adopted on the Continent and was arrived at by using the strongest current the patient could bear and maintaining it for a sufficient time, which when multiplied in minutes by the number of milliampères resulted in a total of 600, *e.g.*, 30 m.a. for 20 min.=600 m.a.m.

Dr. F. HOWARD HUMPHRIS wished to bear out the remarks of Dr. Curtis Webb, and from personal experience to testify that, as an adjunct to gynecological treatment, electro-therapy was invaluable. He had used it himself for several years, and had found that results could be obtained from its use which he had been unable to get without it. Various ill-defined pelvic pains and backache could be relieved as surely with the Faradaic current as with a hypodermic injection of morphia, only it was not with every Faradaic coil that these results could be obtained; different lengths of wire were needed in different cases, but in most conditions, in which a sedative effect was required, a long, fine wire coil, used with a bi-polar vaginal electrode, would give relief in 15 to 20 minutes. In cases of sub-involution, in prolapse, and in all conditions in which the uterus was lacking in tone, electricity was one of the most valuable remedial measures. In these cases static electricity, the vacuum tubes applied locally, and the wave current over the lumbar region, Dr. Humphris had found to be of special benefit, pain being relieved from the first, and the pathological cause being ultimately improved or replaced by the former physiological healthy condition.

Dr. Humphris heartily concurred in the statement as to the value of the incandescent light bath, but preferred the use of the single high candle-power lamp, especially in cases of painful menstruation, and wished that time had permitted him to quote several successful cases. In cervical endometritis Dr. Humphris had been in the habit of using the uncovered copper electrode in the cervix, with the indifferent negative pole made of clay, thus by cataphoresis disinfecting the cervical canal with nascent oxy-chloride of copper. This, he explained, is the procedure of Dr. Betton Massey, under whom he had worked for a little time, and to whose teaching and book (a) he owed a deep debt.

In conclusion, Dr. Humphris added to the plea in the valuable paper of Dr. Curtis Webb for the more general use of electricity as a therapeutic agent in gynecological practice, not as a universal panacea, but as a most useful addition to the usual means of resource, not necessarily as a substitute for, but as an adjunct to, the more classic forms of treatment, as a palliative in many cases of pain, and as a curative agent in those cases which are amenable to its influence.

The PRESIDENT (Dr. Macnaughton-Jones) said that years since Charles Goodell had taught him that there were things in gynecology we had to "learn to unlearn"—practices we followed that we had to abandon, others we despised which we were forced to accept. The one thing we all had to unlearn was bias and prejudice. A good deal of both had existed with regard to electrical treatment in gynecology. This might be explained by the fact that we had hitherto been generally ignorant of the nature and structure of electricity, and how the different kinds operated in their therapeutical applications. Physicians desiring to be exact looked with suspicion on a treatment which they regarded as empirical, and the action of which they could not explain. Hence a bias and scepticism prevailed, but this should not prevent the acceptance of

new facts and the adoption of more rational methods. The late Dr. Charles Routh, almost simultaneously with Cutter, in the sixties, advocated electrical treatment; then came Tripiet, and, following him, Apostoli. When the latter's methods and results were published, he (the President) had procured all his appliances, and had tried both electro-causés and the Faradaic treatment. For the latter he used different coils and the high-tension battery, with the various-sized coils recommended by Apostoli, and which had just been referred to, with the vaginal and intra-uterine bi-polar electrodes.

With regard to electro-causés he had so serious a result in one case that he abandoned it altogether. The patient was a lady who suffered from cataleptic and hystero-epileptic attacks, associated with profuse hæmorrhages from a fibromatous uterus. Every practical precaution was taken in the application of the current both as to strength and antiseptis. At first she apparently did not suffer from the treatment. A skilled electrician was present at each sitting, which was given in bed; suddenly she developed symptoms of peritonitis, which proved fatal. Apostoli pointed out that this class of patient was particularly susceptible and the most risky to treat. With regard to Faradaisation in amenorrhœa and dysmenorrhœa, he had varying results—both with the constant and Faradaic currents. In many cases, as might be expected, there was no influence on either the flow or the pain.

The present discussion had, however, rather turned on cataphoresis and ionic medication—of this he (the President) had no personal experience in gynecological cases. There was no doubt in his mind from the reports he had read of the results in other hands that this method of treatment might be very beneficial in certain affections of the female genitalia, but he quite agreed with Dr. Routh that there were cases in which the delay necessitated in carrying out the treatment might be disastrous to the patient. He could not agree that curetting only removed the mucous membrane. It affected intimately the underlying muscular structure and set up a new circulatory relation between the uterus and adnexa through the blood vessels and the lymphatics, having a most important effect on the latter. Of course he referred to thorough curetting and at times tamponading of the uterus, not to mere superficial and co-called scraping. The all-important point, in deciding on any form of electrical treatment, was diagnosis. Apostoli had emphatically insisted on this. In many forms of adnexal disease such treatment was not only inapplicable and useless, as, for example, in pyosalpinx, but extremely dangerous, not merely from the point of view of delay, but from the nature of the interference itself.

#### CASE OF PLACENTA PRÆVIA IN WHICH IT WAS DEEMED ADVISABLE TO PERFORM CÆSAREAN SECTION.

Dr. MUNRO KERR, of Glasgow, reported a case of Cæsarean section for placenta prævia. The patient—a lady 28 years of age—was seen with Dr. McEwen, of Helenborough; she was one week from full term, and had been curetted by Dr. Donald, of Manchester, for fibroid tumours of the uterus. She was considerably better for this operation, and soon after became pregnant. For a few weeks before full term hæmorrhage occurred from the uterus on several occasions, and an examination under an anæsthetic revealed the presence of a centrally situated placenta prævia. The fibroid tumours, which are situated centrally over the fundus, had become considerably larger. After careful consideration of the case, Dr. Munro Kerr came to the conclusion that the best treatment would be Cæsarean section, since it held out the best prospect of saving the child's life, and of avoiding the risks to the mother so likely to accompany a case of placenta prævia. Further than this, removal of the uterus was likely to be soon required, and the chance of any further pregnancy was small. The friends having given their consent, he performed Cæsarean section, removing a centrally situated placenta prævia and delivering a living child. The uterus was then removed by supra-vaginal amputation. It contained a number of fibroids, the largest one on the anterior

(a) "Conservative Gynecology and Electrical Therapeutics." By G. Betton Massey, M.D., Philadelphia.



wall about the size of the closed fist. The patient made a good recovery except for a slight attack of pleurisy on first getting up.

Dr. Kerr had seen one other case in which similar treatment would have saved the child, and, in all probability, the mother also. It was a case of central placenta prævia in a primipara of 36 years of age with a generally contracted pelvis. Delivery was finally effected by craniotomy after version. Judiciously chosen he was convinced there was a place for Cæsarean section in certain cases of placenta prævia. By the ordinary methods of treatment placenta prævia had a maternal mortality of 6-8 per cent. and a foetal of 50-60 per cent. in hospital practice, and the respective mortalities were much larger in general practice. In a carefully chosen case at full term, not interfered with, and where there was every prospect of a difficult extraction if the child was delivered *per vias naturales* would Cæsarean section have a higher maternal mortality than 6-8 per cent.? Certainly not.

In fact in a series of cases where these respective treatments were employed Cæsarean section would probably give a lower mortality, for he knew of nothing more likely to be followed by death or grave septic mischief than a difficult extraction with a placenta prævia. With a full term child this operation, too, would certainly give it a much better chance of surviving.

He only claimed that in certain well-selected cases at full term Cæsarean section had a place, and was sound treatment.

Sir WILLIAM SMYLY said that in the case recorded where placenta prævia was complicated by uterine myomata, Cæsarean section followed by hysterectomy was undoubtedly the correct line of treatment, and he most cordially congratulated Dr. Munro Kerr upon its success. Both conditions called for relief, and it was better practice and involved less risk to both mother and child to treat them simultaneously. He had not himself met with a case of placenta prævia in which he thought an abdominal operation advisable.

Dr. GRIFFITH had been convinced for some years that certain special cases of placenta prævia would be best treated, both in the interests of the mother and the child, by Cæsarean section. The difficulties, and therefore the dangers, of placenta prævia, were very slight when dilatation of the cervix was easy and labour pains powerful, but the difficulties increased with the difficulty of dilatation and the absence of pains, and it was in the cases where the placenta was the so-called "central," the cervix closed and tough, and considerable hæmorrhage present that the danger was great.

In January, 1905, he was called by Dr. Crabtree, F.R.C.S., of Weybridge, to a lady, 38 years of age, who had two severe hæmorrhages. The child was lying in the first position above the brim, the cervix closed and tough, the pelvis of normal size, and the vagina narrow. Both husband and wife expressed the wish that the life of the child should be saved, and readily agreed to Cæsarean section, which was at once performed. Both mother and child made an excellent recovery. The need of special care to ensure complete detachment of the placenta had impressed itself upon Dr. Griffith. He had to remove a piece of firmly adherent placenta, which he had left behind, from the lowest part of the uterine cavity, 36 hours after the operation. The child—a boy—is living and strong, and there has been no subsequent pregnancy.

Vaginal Cæsarean section, which, in his opinion, would be the operation of election in a similar severe case of accidental hæmorrhage, would probably involve too severe hæmorrhage in a case where the placenta was prævia.

The PRESIDENT said that the case brought before them raised the all important question of the justification for Cæsarean section in placenta prævia. It had quite recently given rise to one of the most important discussions at the McDowell Centennial Anniversary in America, in which their late president, Dr. Herbert Spencer, took part. The case brought forward by Dr. Munro-Kerr was obviously, from the myomatous complication, one in which the operation was indicated, as also in that mentioned by Dr. Williamson.

Such complications demanded operation. He (the President) agreed that in primipara, with a rigid and undilatable cervix or abnormally small introitus, especially with central attachment, the step was indicated. But he thought that many advocates of Cæsarean section greatly exaggerated the dangers to the mother of this complication. Henry Fry, in the discussion referred to, instanced the reports of 161 cases distributed between six operators, and also quoted Holmes, who had collected 1,029 cases distributed between 11 surgeons, and the mortality in both instances did not exceed 3.3 per cent.

The whole question was one well worthy of a special discussion, when the vast experience gained in the British Lying-in and Maternity Institutions could be availed of, and an authoritative opinion might go forth from this Section. The well-known teachings of the Irish school, from which he himself hailed, and which for years he had followed, convinced him that only in very exceptional instances was Cæsarean section called for. As was stated by Fry, if we allow for the occurrence of placenta prævia once in a thousand pregnancies, then the demand for Cæsarean section would not exceed one in 20,000. There were many incidental points which it would be well to have debated if the subject came up for special discussion in the Section.

#### NORTH OF ENGLAND OBSTETRICAL AND GYNÆCOLOGICAL SOCIETY.

MEETING HELD IN LIVERPOOL, OCTOBER 15TH, 1909.

Dr. J. W. MARTIN (Sheffield) President, in the Chair.

Dr. A. J. WALLACE (Liverpool) showed an extreme example of hydrocephalus, and also a uterus and vagina removed for

##### CARCINOMA OF THE CERVIX.

extending superficially over the entire anterior vaginal wall. The uterus was freely movable, and there was no infiltration of the parametric tissues. The vagina was first separated from below, and its lower end invaginated and closed by a double row of sutures. The operation was completed by the abdomen, an ordinary pelvic dissection being performed. The pelvic glands on the left were enlarged and were freely cleared out. Those on the right side were much enlarged and too intimately adherent to the iliac vessels to justify removal.

Dr. J. E. GEMMELL (Liverpool) showed a good example of a rare foetal monster. *Symelus*.

Miss IVENS (Liverpool) read the notes of five cases of

##### TUBERCULOUS SALPINGO-OVARITIS.

In four the disease was apparently primary in the tubes, in the fifth there was an associated bone lesion. The ages varied from 20 to 36. Dysmenorrhœa was the only symptom common to all. Dysuria occurred in four cases, and menorrhagia in three. In no case was the uterus removed, though both tubes were extirpated in each case. A portion of ovary was left in all but one instance. In all there has been an immediate and maintained good result, with gain in weight and freedom from pain. In one tuberculous peritonitis developed but subsided with tuberculin treatment.

##### GASTRIC OR DUODENAL ULCER AS A CAUSE OF PELVIC PERITONITIS.

Dr. ARNOLD W. W. LEA related 3 cases of pelvic peritonitis which had developed in patients suffering from symptoms of gastric or duodenal ulcer, and called attention to the possibility of perforating ulcer being a causal factor in the production of the disease. Two of the patients were single, one was married, but sterile. In all the usual sources of ascending infection could be excluded. In each instance there was a history of long continued dyspepsia, which was followed by a severe illness with symptoms of general peritonitis, apparently due to rupture or leakage of an ulcer. It is well known that in perforation of a duodenal ulcer the fluid tends to flow into the right iliac fossa, and into the pouch of

Douglas. If no operation is performed and the patient is able to withstand the peritonitis which follows, the fluid will tend to collect in the floor of the pelvis. This may undergo complete absorption, but it is possible that the inflammatory re-action which ensues may result in the formation of adhesions around the uterus and appendages. In these cases the uterus was found at the operation to be firmly adherent to the pelvic floor with a variable degree of perimetritis and fixation of the appendages. Ventro-fixation was carried out with relief to the pelvic symptoms.

Dr. LEITH MURRAY (Liverpool) read a paper on the anti-autolytic action of blood serum and its relation to hyaline degeneration in uterine fibroids. Small pieces of a fibroid incubated in serum very soon develop distinct hyaline change limited to the connective tissue. Muscle fibres take a purely passive part in the process. The hyaline appearance produced resembles hyaline degeneration occurring naturally both to general microscopical examination and in staining peculiarities.

The clear fluid cavities in œdematous fibroids do not result from thinning out of surrounding hyaline material, as Kelly and Cullen assert, but the fluid in them is directly responsible for that change, and can produce it in vibrio.

## CORRESPONDENCE.

### FROM OUR SPECIAL CORRESPONDENTS ABROAD.

#### FRANCE.

Paris, Oct. 24th, 1909.

#### THE SERTHERAPY OF TETANUS.

ANTI-TETANIC serum is, like the serum of Behring-Roux, an anti-toxin serum which renders inoffensive the toxin circulating in the blood by combining itself with it, but possesses no action on the bacilli which produced the toxin.

The bacillus of tetanus discovered by Nicolaier remains fixed in the wound it infects, a wound anfractuous, irregular, and soiled by earth, mud and animal dejections. The toxin it creates diffuses, on the contrary, beyond the wound, following, as Marie proved, the tract of the nerves until it reaches the nerve centres and fixes itself on the nerve cells, for which it possesses a particular affinity, thus producing the characteristic contractions of tetanus.

The method of preparing the serum for tetanus is rather too complicated to recall here. It will suffice to say that it is prepared like similar serums by immunisation of animals. MM. Roux and Vaillard employ the serum of the horse. According to Dr. Torres, an authority on the subject, the serum may be injected subcutaneously into the veins, along the nerve or in the neighbourhood of the nerve centres.

Hypodermic injections, in order to be efficacious, must be employed at the very outset of the accident—that is to say, before tetanic symptoms have set in; they should also be abundant, according to Louis Martin, to have any chance of being successful; two to three ounces should be injected daily for at least a week, as the immunity conferred by each injection does not extend beyond ten days, and if at this moment the bacillus has not disappeared from the wound, tetanic symptoms set in.

Intravenous injections have also been practised as creating a more rapid action than the subcutaneous method.

Here also large doses are indicated. Louis Martin and Darré successfully injected as much as three ounces into the vein of a boy eight years of age. However, similar doses should be injected under the skin concurrently with the above.

Apert and Lhermitte recommend para-radicular injections into the canal of the sacrum. This method appears to possess advantages; it is easy to execute, can be renewed as frequently as necessary; it reaches the nerve at the point where it divides into its numerous branches (cauda equina). Each branch is thus plunged in an anti-toxin solution at the point

where it is not yet enveloped in the membranes of the cord.

As to the results of the treatment of tetanus by the serum method, Roux and Vaillard declare that the action is purely but yet really preventive, but it has no effect on the infection.

The immunity conferred is only temporary, and disappears completely between the fortieth and fiftieth day. The quantity of serum necessary to prevent fatal consequences increases in proportion to the number of days that have elapsed after the primary infection. Where a certain time has elapsed—say a month or six weeks—the serum is useless.

Has the serum a curative effect? The question was much debated two years ago at the Académie de Médecine. While some were entirely opposed to the idea of any curative action, others affirmed having obtained cures in the active period of the disease, but all were agreed on its prophylactic efficiency.

Consequently, each time that a wound is found to be soiled with earth, mud, or manure which may contain tetanic spores, the surgeon's duty is to inject the anti-toxin serum daily until the wound be completely healed. However, local antiseptic treatment should not be neglected; complete disinfection of the wound and application, if possible, of dry serum reduced to powder, not forgetting the general classic treatment; isolation in a darkened room, administration of chloral and bromides in large doses, and subcutaneous injections of phenic acid as recommended by Bacelli.

If, in spite of all, tetanus sets in, large doses of serum may be injected, and perhaps also intrarachidian injections of sulphate of magnesia, as strongly advocated by Blake, Griffon and others.

#### GRANULAR CONJUNCTIVITIS.

Soft, granular lids are a common affection, and divers forms of treatment have been advocated and used. It must be said that each and every one of them have shown certain advantages. Touching the granulation with a solution of nitrate of silver was common practice, but it was superseded by the method of Dr. Hache, which is very successful, and consists in painting the surfaces after dry rubbing with a piece of antiseptic cotton wool, so as to provoke bleeding, with a solution of iodine in vaseline oil (iodine, 1 gr.: vaseline oil, 2 dr.).

Another agent would seem to be particularly successful in the treatment of granular lids: it is hermophenyl, an organo-metallic powder containing 40 per cent. of mercury, and very soluble in water; it has the advantage of not irritating the tissues, while its toxic effects are insignificant. The salt is employed in solution of 1-30 for purulent ophthalmia. For granular conjunctivitis the strength of the solution is 15 per cent., or 30 gr. for 2½ drachms of distilled water, and painted over the surface of the conjunctiva. For bathing the eye, a solution of 1-200 is employed: the results are much superior to those obtained with boric acid, the antiseptic properties of which are illusory. By this treatment a cure is obtained in about 20 days, or half the time required by the iodine treatment.

Ciliary blepharitis is also very amenable to treatment with hermophenyl. A plug of cotton, moistened with a solution of 1-20, and rubbed briskly on the edges of the lids every two days, produces a rapid cure.

#### GERMANY.

Berlin, Oct. 24th, 1909.

#### THE NEW ERA OF OBSTETRICS AND VAGINAL CÆSAREAN SECTION IN CONTRACTED PELVIS.

THIS is the title of a contribution by Prof. Dürhsen to Hegar's Beiträge 14, I. Cæsarean section and pubiotomy, says the writer, are to be avoided as much as possible. In placenta prævia he recommends the metreurynteur in the first instance for the arrest of hæmorrhage. It also affords the smallest infant mortality. With moderate hæmorrhage during the pregnancy, and a closed os uteri, an attempt should be made to carry on until the normal end of the pregnancy, by means of anti

and aseptic tamponade of the vagina. With more free hæmorrhage during the pregnancy, and a closed os, metreuryis with preliminary moderate dilatation by means of the finger along with rupture of the membranes is indicated, with possible vaginal Cæsarean section. During the labour internal version should be effected, and with moderate pulse extraction may follow, but only when the os uteri is fully dilated. In all other cases combined version is to be preferred on account of the ease with which it can be carried out, and also on account of lesser infant mortality. If the hæmorrhage is arrested it will only be necessary to watch the further course of the labour and see that the strength of the patient is maintained. For many myomata and also for many ovarian tumours encountered during labour vaginal removal is the proper way, when the uterus can be emptied at the same time. In case of normal pelvis there is no reason to give up vaginal Cæsarean section in favour of the supra-symphysary form of operation. It is within his view to displace suprapubic Cæsarean section in contracted pelvis by vaginal Cæsarean section combined with Ritgen's gastro-elytrotomy, as from the vagina he opens the cervix uteri extraperitoneally, draws the neck on one side, then opens the abdominal wall subperitoneally, and through the passage thus made extracts the child above the pelvis. For all doubtful cases it is necessary that the drainage should be good and that there should be no tension anywhere. The most perfect drainage is attained when the anterior vaginal arch is opened and kept open through the vaginal Cæsarean section, and the most perfect relaxation when the bladder is separated from the uterus, and the whole of the uterine wound left open.

#### ADRENALIN IN CÆSAREAN SECTION.

This question is discussed by Dr. M. Bogdanovics in the *Zentralbl. f. Gyn.*, 12, 09.

The maximum dose of adrenalin is, he says,  $\frac{1}{2}$  mg., equal to 15 drops of a 1-1,000 solution. Even in cases of general infection it is just as useful as for the arrest of hæmorrhage, in combating collapse and cardiac failure. In a case referred to, one of generally contracted flat rickety pelvis, the conjugate was 7.3. In spite of powerful contractions the head did not enter, and the bladder gave way. Cæsarean section was performed. The uterus contracted badly, and there was free atonic post-partum hæmorrhage. An injection was made into the uterine wall of 1ccm. of a 1-1,000 solution of adrenalin, when the uterus contracted with effect.

#### VENENANÆSTHESIE.

This method of producing anæsthesia has been practised in the human subject by Prof. A. Bier, and a report of his experiences in 134 cases is given by him in the *Berl. Kl. Wochensh.*, 11/09. In 115 of the cases the result was good, in 14 gratifying, and in 5 it was unsatisfactory. By intravenous injection the anæsthetising solution passes quickly from the veins into the tissues, and the method far surpasses local anæsthesia. He makes use of a graduated syringe containing 100 ccm. The needles have very thin walls, and are connected with the syringe by very thick indiarubber tubing into which a stop-cock is inserted. Near the point of the needle is a circular groove, into which the thread used in tying the vein runs. The anæsthetising fluid is a 0.5 per cent. solution of novocain in physiological saline solution, and used at about the normal body heat. It was found of advantage to make the part to be operated on as bloodless as possible. This is done in the usual way with the Esmarch expulsion bandage, but the bandage must be put on very firmly. Where there is infection, however, or tumours with infected cells, the bandage need not be applied, but it may in all cases of necrosis and tuberculous joints. At the upper end of the expulsion bandage that is above the spot that is to be operated on, the proper bloodless bandage of thin indiarubber is to be applied in many folds. A second bandage of the same material is now to be applied below the field of operation, and the injection is to be made between the two bandages. It is suggested

that for exposing and opening of the vein Schleich's "Infiltrationsanæsthesie" should be made use of. The vein must be large enough to take the cannula easily; for the leg the saphena is named, for the arm the cephalic and basilic or the median vein of the elbow. If the vein is not visible it must be sought for by transverse incision. The injection must always be made in a peripheral direction. Intravenous injections are not more poisonous than those into the tissues. "Venous anæsthesia in completeness and amplitude is destined to put all other methods of local anæsthesia into the shade."

#### AUSTRIA.

Vienna, Oct. 24th, 1909.

#### STATUS THYMICO-LYMPHATICUS.

NEUSER, in a long paper at the Budapest International Congress, endeavoured to form a differential diagnosis of this disease, which he said was as yet very badly defined. Paltauf had described a number of cases under the title of the lymphatic chlorotic constitution as a result of his anatomical research. Some of his pupils, particularly Bartels, Kyrles, etc., have found a hypertrophic and atrophic stage in the scrotum, ovaries, and arteries. Neuser thinks the individual terms, status thymicus-lymphaticus and hypoplasticus is not sufficient to cover all the clinical varieties. At this point he gave a few clinical histories and anomalies to illustrate the point. Two individuals, he said, had reached their sixtieth year, both of whom had been afflicted with infectious diseases as well as typhoid and dysentery, and now were healthy and strong, but on the other hand two younger people suffering from this anomaly take trifling diseases such as catarrh, jaundice, or purpura hæmorrhagica, and suddenly die. Pernicious anæmia, lymphatic leukæmia, morbus Basedowii, and Addison's disease, all belong to the same class.

The diagnosis of status-lymphaticus depended largely on a careful examination and true value of the symptoms, such as enlargements, increased growth, delicate structures, dilatation of the pelvis in the male, and movement at the epiphysis. In the female late appearance of menstruation, hyperplastic uterus, comparatively small pelvis, hydrocephalus, rudimentary symptoms of morbus Basedowii, osteomalacia, Stokes-Adams' symptoms, and other forms of fibrous polyserositis and cirrhosis of the liver are pathognomonic of the disease. In conclusion, he affirmed that the diagnosis was not so easily accomplished clinically as in the post-mortem room, yet the clinician, with careful observation, could often recognise rudimentary conditions in a hypoplastic constitution that were characteristic.

#### OBESITY.

Van Noorden contributed to the Congress an interesting paper on the ætiology of fat, which he divided into two forms: (a) the active overfeeding; (b) the necrotic form of fat; but frequently both were combined. The first arising from over nutrition and reduced energy, is quite reasonable and easily demonstrated, but the second is more difficult to explain, where the intake is less than the normal, though the average work is more than the energy supplied, which may be termed constitutional obesity. After decenniums of discussion we are still without a reasonable cause beyond the hypothesis that the oxidising energy of the organism is reduced. This is a factor all are agreed on, but the connection with the glands, and particularly the thyroid, is an active agent in this oxidising transition. Primary thyrogenic fat is conceivable when any changes take place in the thyroid gland such as atrophy, degeneration, functional disturbance, etc., but this thyrogenic condition has also a secondary form, where the functional anomaly of the gland awakens a disorder in other organs, such as the pancreas, hypophysis cerebri, thymus and suprarenal gland, which are co-related by means of internal secretion. The importance of this inquiry is not only theoretical, but demands our attention in practice as to how therapy should be conducted.

## FROM OUR SPECIAL CORRESPONDENTS AT HOME.

### EDINBURGH.

**APPOINTMENT OF PRINCIPAL TO THE ABERDEEN UNIVERSITY.**—The King has been pleased, on the recommendation of the Secretary for Scotland, to approve the appointment of the Rev. George Adam Smith, M.A., D.D., LL.D., to be Principal of the University of Aberdeen, in succession to the late Principal Marshall Lang, whose death was referred to in this column a few months ago. Dr. George Adam Smith is one of the most eminent clergymen in the United Free Church, and is esteemed alike as a preacher, a scholar, and a personality. He is 53 years of age, and after passing through the usual theological training at the New College, Edinburgh, he supplemented the curriculum there by studying the Semitic languages at Tübingen and Leipsig. In 1880 he was appointed to conduct the Hebrew classes in the Free Church College, Aberdeen, on the suspension of Robertson Smith, probably the greatest scholar the Free Church has ever produced. After an interval of 12 years he was appointed to the chair of Old Testament Language, Literature, and Theology in Glasgow, and during his tenure of that office his reputation has steadily risen. There may be, perhaps, a certain feeling of disappointment that a member of our own profession has not been elevated to the Principalship of Aberdeen; but Dr. George Adam Smith is a man who enjoys an almost European reputation. He is a brilliant scholar, a man of the most liberal views, and one who takes an active interest in social work. He is endowed with a most persuasive and charming personality, and seems in every way an ideal man for the position to which he has just been raised.

**ISOLATION HOSPITAL AT DINGWALL.**—The newly-constructed Isolation Hospital in connection with the Ross Memorial Hospital at Dingwall was opened on October 21st by Lady Munro of Foulis. The hospital, which has cost £1,400 to build, is situated in the rear of the present building, and will secure complete separation of different infectious diseases sent from various parts of the county. Dr. Bruce, introducing Lady Munro, said that during the past six years 3,000 patients had been treated, including 140 cases requiring major operations, and 625 cases of fever.

**ROXBURGH, BERWICK, AND SELKIRK ASYLUM.**—The Medical Superintendent's report shows that there were 316 resident patients on May 15th last; 40 men and 32 women were admitted; 405 patients were under care during the year, of whom 43 were discharged, and 38 died. Hereditary predisposition was ascertained to exist in 32 (44.4 per cent.) of the new cases; in 24 cases (33.3 per cent.) there were suicidal tendencies. In 76.4 per cent. of the patients the physical condition was poor, and in 5.6 per cent. very bad. Of the 43 patients discharged, 21 had recovered, 10 were relieved, and 2 not relieved. The recovery rate was 43 per cent., that for the previous 36 years since the asylum was opened being 33.4 per cent. The process of reconstruction of the asylum, which has now been in progress for 13 years, is now within measurable distance of completion.

### GLASGOW.

**THE TEACHING OF ANATOMY IN GLASGOW.**—Professor Bryce, as the newly appointed Professor, in his opening address on the 18th inst., took "The Teaching of Anatomy in Glasgow" as his subject. After alluding to the earlier occupants of the chair, he pointed out that the Glasgow chair, which was founded in 1718, was from the first a chair of comparative anatomy, including in early days zoology, vertebrate and invertebrate, physiology, pathology and even surgery. In 1807 zoology was separated, and physiology in 1839; but, notwithstanding this specialisation, the chair had always remained one of comparative anatomy, and the ideal of 1720, viz., that the university teaching of anatomy involved the profession of everything that elucidated the structure of the human body, remained the ideal of 1909. Joseph Black, the famous chemist,

was an occupant of the chair. Allen Thomson, appointed in 1848, was the first who devoted himself wholly to anatomy. He was a pioneer in the study of embryology, was associated with Sharpey, Cleland, Schäfer and Thane in the seventh, eighth and ninth editions of "Quain's Anatomy," and added much to the reputation of the chair. Professor Cleland, who followed, had been generally acknowledged as the most philosophic anatomist of his time. He was specially interested in morphological questions, more particularly in the morphology of the skull. In his "Animal Physiology" and his various addresses, such as that on Evolution, Expression and Sensation, and the Classification of the Vertebrata, he developed with argumentative force and subtlety his conception of definite and determinate evolution as opposed to that of natural selection. Professor Bryce then shortly indicated the lines on which he hoped to see the study of anatomy developed. He claimed that the teaching of histology—that was of normal as opposed to applied or physiological histology—would more properly be taught in the anatomical department. He next referred to the paramount importance, for the comprehension of anatomical fact, of a study of development, and pointed out that the enormous advances in recent years of the knowledge of the details of human development placed the teacher in an increasingly advantageous position for the demonstration of embryological facts.

**THE ANNUAL DINNER OF THE SOUTHERN MEDICAL SOCIETY.**—Dr. Peden, the President, took the chair at this annual function, on the 21st inst. Dr. Chas. Robertson, in proposing the health of the guests, desired information from Dr. Roberts (the newly appointed Medical Officer of the School Board) as to what was going to be the attitude of himself and his assistants in regard to the treatment of school children and their relationship to the general practitioner in the city. Dr. Roberts stated that he would endeavour to protect the interests of the general practitioner, and that only those in necessitous circumstances would be treated either by himself or his assistants, and he anticipated that their interests would in no way clash with the interest of the general practitioner.

**REQUEST TO THE GLASGOW WESTERN INFIRMARY.**—By the will of the late Mr. Alexander Fleming, of Messrs. W. Baird and Co., coal owners, the Glasgow Western Infirmary will benefit by the sum of £10,000. Altogether, over £61,000 has been bequeathed by the deceased gentleman to Glasgow and West of Scotland institutions.

### BELFAST.

**INSPECTION OF MILK SUPPLY.**—A special meeting of the Public Health Committee of the Corporation was held last week to consider the report of the Medical Superintendent Officer of Health on the Sanitary (Veterinary Inspectors') Order, 1908, and also a letter from the Local Government Board on the subject of Section 19 of the Tuberculosis Act, in respect of dairies outside the area of the city. In his report Dr. Baillie pointed out that the order substitutes the Veterinarian for the Medical Superintendent Officer of Health for practically all matters relating to the milk supply of the city. Since the Medical Officer is responsible for matters concerning the health of the city, the objection to the Order is obvious. Divided responsibility would be most objectionable in such matters. The Order may be very useful in country districts where the provisions of the Dairies, Cow-keepers, and Milkshops Order have not been carried out; but it would be most unsuitable and unsatisfactory for Belfast or any other large city. The general opinion of the Committee was that it would be unworkable and impracticable in Belfast, and a small deputation was appointed to wait on the Local Government Board on the subject.

**QUEEN'S UNIVERSITY OF BELFAST.**—The first Matriculation Examinations under the new University were held in Belfast during the past week, and the number of entries is likely greatly to exceed the entries at the College in any previous year. Since some of the entries will be made through the Royal University, and some

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through the Intermediate Education Examinations, it is impossible to estimate the numbers as yet. The third and fourth year medical classes have been much upset by the new regulations, some being crowded and others nearly deserted, and no doubt it will take a few sessions to straighten matters out, and get properly into the running of the new curriculum.

## LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

### RELIGION AND MEDICINE.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—In your able leader of Wednesday last I venture to think you put your pen on the beginning and end of Christian Science, when, while exposing its "side of positive nonsense," you display religion's opportunity "to pluck from the memory a rooted sorrow, or to cleanse the bosom of that perilous stuff that weighs upon the heart."

The Christian Scientist appears to be making the error common to all flesh—riding his idea to death—he sees his speciality in every case. On the other hand what Christian Science might be able to do can be done, has been done and is being done by the orthodox in all the ordinary religions. Except therefore, perhaps, as a new money-making machine the *raison d'être* of Christian Science is not easy to see. As to the wider study "Religion and Medicine," which is the heading of the leader I am referring to, that is a matter lost in the illimitable sea of change, as shown for example in the history of Lombroso's mental life or in the following lines which "Vanoc" a few weeks ago had in one of his articles:—

"A fire-mist and a planet,  
A crystal and a cell,  
A jelly fish and a saurian,  
And caves where cavemen dwell:  
Then a sense of law and beauty.  
A face turned from the clod,  
Some call it evolution,  
And others call it God."

I am, Sir, your truly,  
G.F.D.

### THE SCOTCH COLLEGES AND THE MEMBERSHIP DIPLOMA.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—Some time since an open letter appeared in your columns addressed to the Royal College of Surgeons of Edinburgh by the Association of Medical Diplomates of Scotland with reference to the creation of a membership diploma. As a Scotch licentiate of many years' standing, it would interest me greatly to hear if the proposal was favourably or otherwise received by the Council of the College. In my own practice I have found the lack of a membership qualification, that is to say, of one equal in titular degree to that of the majority of my competitors, a serious practical drawback on more than one occasion. So, too, have many of my friends who hold the Edinburgh conjoint diploma. What logical reason can the College have for refusing the membership that would add so greatly to its attractions: and, more than that, would bring a large amount of money into its coffers? It seems to me, as a plain man, that the day of the provincial university is at hand, and that the Colleges, English, Scotch, and Irish, will soon have to face a sharp struggle for survival. In England the higher diplomates of the two Colleges have secured a virtual monopoly of the larger hospital posts, but that will hardly enable them to compete in the long run with the higher University degrees in surgery. But we are concerned more precisely at present with the Scotch colleges. Why should they not, both at Edinburgh and at Glasgow, unite and take advantage of the permission given them in the Medical Act of 1858 to grant the diploma of M.R.C.S.? Why not, indeed, unless they wish to set up a lasting monument of conceit, that preferred their own selfish and

petty parochial interests to those of the vast body of licentiates whose money they were not above accepting. *Quem deus perdere vult, prius dementat.* I, for one, Sir, trust the Association of Medical Diplomates of Scotland will not let this matter drop.

I am, Sir, yours truly,

L.R.C.S. and P.EDIN.

Staffs, October 26th, 1909.

## OBITUARY.

### DR. T. SPENCE MEIGHAN, OF GLASGOW.

On account of the sudden death of this gentleman, we were able only to chronicle the fact in our last impression, that he was seized with sudden illness in the street, was taken to a nursing home, where he died shortly afterwards without regaining consciousness. Dr. Meighan was a general practitioner in the East End of Glasgow during most of his professional career, but from an early date took a special interest in diseases of the eye, and while engaged in general practice among the poorer population he managed by his ability and by the force of his character to find or make time to cultivate diseases of the eye, in which speciality he attained deservedly a very high reputation not only in Glasgow but in the West of Scotland. For many years he conducted a class on ophthalmology in Anderson's College, Glasgow. He was an excellent teacher, and knew the wants of the general practitioner, and his instruction was always of a practical character. He was ambidextrous, and could operate with equal facility with both hands. It was generally allowed that he was the most expert operator in Glasgow in cases of cataract. He was honoured some time ago by being made a Fellow of the Faculty of Physicians and Surgeons, Glasgow. He wrote several pamphlets on the eye, bearing the mark of acute observation, and of a practical character. His life affords a splendid example of a general practitioner forcing his way to the top of his profession in a speciality under unusual disadvantages and hardships. His sudden death in the fulness of his powers recalls the lines of Dr. Johnson on Dr. Levett:—

"Death broke at once the vital chain  
And freed his soul the nearest way."

### CESARE LOMBROSO.

THE late Professor Lombroso was born at Verona on November 18th, 1835. He was descended from a Jewish family which had attained high positions as doctors, lawyers, rabbis and authors. As a boy Lombroso was well-nigh precocious. At twelve years of age his "Greatness and Decline of Rome" was published, and from that time he steadily began to build that fabric which is now such a remarkable reputation.

## MILITARY & NAVAL MEDICAL NOTES.

**TUBERCULOSIS IN THE NAVY.**—Statistics furnished by the First Lord of the Admiralty, in reply to recent questions in Parliament, show that 2,673 officers and men suffering from tuberculosis were invalided out of the Navy between 1889 and 1906. Of course, the number is comparatively small with so large a body of men, the conditions of naval life, as has been aptly shown, do not tend to induce this disease, so that greater care is suggested in the medical examination of naval recruits. As such strong comments have been made about the discharge from hospital of these military and naval cases to their homes on being invalided, doubtless in more or less advanced stages of the disease, repeated questions have been put in the House of Commons to the First Lord of the Admiralty and also to the Secretary of State for War. A suggestion has been made in one military journal that a small hospital or home for men invalided for

this disease out of the two Services might be established, and it points out that the cost would not greatly exceed the payment of the present invaliding pensions of 9d. or 1s. a day, and turning them adrift.

**KING EDWARD VII. HOSPITAL.**—A letter by a Gunner Major appears in *The Pioneer Mail* of India, appealing to officers to contribute 5s. yearly to this hospital, generally known as Sister Agnes' Hospital. Long since a claim for support of this institution was publicly made. The benefits conferred by it on officers have been very great. Numberless sick and wounded officers were tended with great care and efficiency during the South African War, and the good work has ever since been continued through Sister Agnes' (Miss Agnes Keyser) generosity. It will certainly be a reproach to the military if the pleading for funds by small subscriptions fails to meet with response.

**A TEST OF WAR RATIONS.**—A test of these has been undertaken by a detachment of twenty soldiers, who started from Tidworth on the 11th inst. to march backwards and forwards across Salisbury Plain at the rate of fourteen miles a day. The test is to be carried out as nearly as possible under war conditions, the men sleeping under canvas, and on the march carrying their knapsack, food, and kindling wood, etc., etc. The men will be watched by Army medical officers. The daily ration is to consist of: 1½lb. fresh meat or 1lb. preserved, 1½lb. of bread or 1lb. biscuits or flour, ½oz. tea, ¼lb. jam, 2oz. sugar, ½oz. salt, 1.36oz. pepper, ½lb. fresh vegetables or 2oz. dried vegetables, 2oz. cake tobacco, to last a week.

**DOGS IN WARFARE.**—It has been known for years past that dogs for ambulance and seeking wounded in war have been trained in several European armies. Our own War Office seems the only one among the Great Powers that is hidebound and will give no attention to its importance. It is indeed a melancholy reflection. In the *Army and Navy Gazette*, of the 18th June, 1904, Colonel Frank Howard (retired), Army Medical Staff, wrote an article on "The Use of Dogs in War," tracing the subject back to the times of the Greeks and Romans, and even the saving of Corinth by war dogs. More recently Major Hautonville Richardson, of Carnoustie, N.B., has pressed home the subject, and has been in Melilla experimenting during the present campaign by Spain in Morocco, and confirms the views of Colonel Howard and other medico-military authorities.

## REVIEWS OF BOOKS.

### THE MORPHIA HABIT AND ITS RENUNCIATION. (a)

THE name of Oscar Jennings of Paris has long been associated with the treatment of the morphia habit on which he is the recognised authority. That the vice of morphinism both in this country and on the Continent is steadily on the increase is the experience of most medical men who practise in large cities. It is but one phase of the craving for drugs of the narcotic type which is the besetting sin of civilised people and especially of society women. Almost daily we see in the papers reports of inquests on the victims of this pernicious custom, and yet in all probability not one-tenth of these cases are afforded the light of publicity; the chief anxiety of the friends and relations being to hush up matters and avoid a scandal.

Dr. Jennings states as a fact that one medical man out of four is a drug *habitué*, usually a morphinist. He is probably speaking of a specially selected class and we do not suppose that the statement applies to the great mass of country practitioners actively engaged in the work of their profession. They, as a rule, although leading an arduous life, are a healthy race, but little addicted to vicious habits. The temptation occurs chiefly in the case of young consultants holding hospital appointments, who have to keep up a good

appearance on totally inadequate means. By most authorities it is held that the habit once established is never eradicated. Many victims anxiously seek to cure themselves by taking those widely advertised remedies which almost invariably consist of some preparation of opium or one of its alkaloids. Any temporary benefit that may accrue is fallacious, for the patient is only obtaining his drug from another source. He still takes his morphia but purchases it at another shop.

The question is not so simple as it first appears for the victim of the craze usually resorts to more than one toxic agent. He is often more or less alcoholic, takes morphia or cocaine during the day and veronal at night. It matters little by what channel the drug is introduced into the system, whether taken by the mouth or injected hypodermically, for the effects are equally pernicious. Dr. Jennings devotes an interesting chapter to "Morphinism complicated by Cocainism," and in another describes a case of Heroin habit. The whole work is illustrated by references to cases which have been under his care, many of them being recorded with an abundant wealth of detail. His most interesting observations, however, are those devoted to treatment, and his remarks on the re-education of self-control and the interaction of mind and body are masterpieces of reasoning. This is not the place to divulge his methods which have been laboriously evolved as the result of many years of practical experience, but we cordially commend the book to the careful attention of our readers, feeling sure that they will derive much useful information from its study. Dr. Jennings has done good work and the conclusions at which he has arrived will have a far-reaching influence on the treatment of the disease of which he treats. His cases are graphically described and his description of "a personal relation of a suppression after twenty-five years addiction" is a most impressive narrative.

## MEDICAL NEWS IN BRIEF.

### Honyman Gillispie Post-Graduate Lectures.

THIS course will be commenced to-morrow (Thursday), at 5 p.m., when the Lord Mayor of London, Sir George Wyatt Truscott, Bart., will be present at the Public Introductory Lecture to be delivered by Dr. George Burford on "The Medicine of the Future: Coming Events that Cast their Shadows Before," at the London Homœopathic Hospital, Great Ormond Street.

### Annual Dinner of the Queen's Hospital, Birmingham.

AT the tenth annual dinner of the Past and Present Residents' Association of the Queen's Hospital, at Birmingham, held at the Midland Hotel, Birmingham, on October 22nd, Dr. Blakeney, of Cheltenham, in the chair, Sir James Sawyer, the senior past president of the Association, exhibited some interesting mementos of the early days of the hospital, including a portrait of the founder of the hospital, Mr. Sands-Cox, F.R.S., dated 1862, and a record of the first ten years of the hospital's work, as a charity and as a clinical institution, from 1841.

### National University—Scheme of Scholarships and Prizes.

A SCHEME of scholarships and other prizes for the session 1909-10 in connection with the National University has been issued. As regards the Faculty of Medicine they are as follows:—

In the subjects of the First Professional Examination, or first year's studies:—

Two Scholarships of £25 each, tenable for one year.

Two Exhibitions of £25.

Two Exhibitions of £15.

Other prizes to amount of £20.

In the subjects of the Second Professional Examination, or second year's studies:—

Two Scholarships of £25 each, tenable for one year.

Two Exhibitions of £25 each.

Two Exhibitions of £15 each.

(a) "The Morphia Habit and Its Voluntary Renunciation." By Oscar Jennings, M.D. Pp. 500. London: Baillière, Tindall and Cox. 1909. Price 7s. 6d.



Other prizes to amount of £20.  
In the subjects of the Third Professional Examination, or third and fourth years' studies:—  
Two Scholarships of £25 each, tenable for one year.  
Two Exhibitions of £25 each.  
Two Exhibitions of £15 each.  
Other prizes amounting to £20.  
In the subjects of the Fourth Professional Examination, or fourth and fifth years' studies:—  
Two Scholarships of £25 each, tenable for one year.  
Two Exhibitions of £25 each.  
Two Exhibitions of £15 each.  
Other prizes amounting to £20.

The Scholarships will be awarded soon after the opening of the session, the Exhibitions at the close of the session.

As the scale of fees for the various classes cannot be completed before regulations have been made in regard to the University courses in the Session 1909-1910, the following arrangements have been provisionally adopted in the Faculty of Medicine by the Governing Body:—

The amount payable for attendance on the courses of instruction given in the College for the primary medical degrees of the National University of Ireland will be £14 per annum if the courses are equally distributed over a period of five years. In the ordinary distribution of the subjects for professional examination in certain years the subjects required are greater in number than in other years, so that the fees in those years would vary accordingly.

#### Royal College of Physicians in Ireland.

At the annual meeting last week, the following officers were elected for the year ensuing:—

President: Dr. Andrew J. Horne. Vice-President: Dr. E. MacDowel Cosgrave. Censors: Dr. E. MacDowel Cosgrave, Dr. E. Hastings Tweedy, Dr. Coleman, C.M.G., and Sir W. J. Thompson. Examiners for the Midwifery Licence: Dr. Spencer Sheill and Dr. D. J. O'Connor. Additional Examiners to take the place of an absent Censor or Examiner: Medical Jurisprudence and Hygiene: Dr. H. T. Bewley. Medicine: Dr. O'Carroll. Midwifery: Dr. T. Henry Wilson. Examiners for the Membership: Clinical, Dr. Bewley and Dr. Coleman, C.M.G.; Practice of Medicine, Dr. E. E. Lennon and Sir W. J. Thompson; Pathology, Dr. H. C. Earl and Dr. A. C. O'Sullivan. Supplemental Examiners under the Conjoint Examination Scheme: Biology, Dr. T. P. C. Kirkpatrick; Chemistry, Professor E. Lapper and Dr. Ninian Falkiner; Physics, Dr. W. A. Winter and Dr. E. J. Watson; Pharmacy, Materia Medica and Therapeutics, Dr. Travers Smith and Dr. M. Dempsey; Physiology, Dr. H. C. Earl; Pathology, Dr. F. C. Purser; Medicine, Dr. G. J. Peacocke and Dr. J. A. Matson; Hygiene and Forensic Medicine, Dr. A. Nixon Montgomery. Examiners for the Conjoint Diploma in Public Health: Chemistry, Professor F. Lapper; Hygiene, Dr. W. R. Dawson; Meteorology, Dr. W. G. Harvey. Extern Examiners for the Conjoint Preliminary Examination: Languages, Mr. E. H. Alton, F.T.C.D.; Science, Mr. R. A. P. Rogers; Irish, Dr. C. Maguire. Representative of the College on the General Medical Council: Sir John Moore. Representatives of the College on the Committee of Management: Dr. Walter G. Smith, Sir John Moore, and Dr. Craig; Treasurer: Dr. H. T. Bewley. Registrar: Dr. James Craig. Librarian: Mr. R. G. J. Phelps. Architect: Mr. A. E. Murray. Law Agents: Messrs. S. Gordon and Son; Land Agents: Messrs. Townshend. Dr. Walter G. Smith, F.R.C.P.I., was elected King's Professor of Materia Medica and Pharmacy in the School of Physic, Ireland, and Dr. Henry Jellett, F.R.C.P.I., was elected King's Professor of Midwifery in the same School.

#### University College, Dublin.

THE following appointments to vacancies in University College, Dublin, have been made by the Dublin Commissioners:—

Dr. Hugh Ryan, M.A., D.Sc., Professorship of Chemistry; Dr. J. A. McClelland, D.Sc., Professorship of Experimental Physics; Dr. George Sigerson, M.D., Professorship of Zoology; Dr. E. P. M'Loughlin, M.B., Professorship of Anatomy; Mr. J. S. M'Ardle, M.Ch., F.R.C.S., Professorship of Surgery; Dr. B. J. Collingwood, M.D., Professorship of Physiology and Histology; Dr. E. J. M'Weeney, M.D., Professorship of Pathology and Bacteriology; Dr. J. M. Meenan, M.D., Professorship of Hygiene and Medical Jurisprudence; Dr. Martin Dempsey, M.D., Professorship of Materia Medica and Therapeutics; Sir Christopher Nixon, Bart., M.D., Professorship of Medicine; Dr. Alfred Smith, M.B., F.R.C.S., Professorship of Midwifery Gynaecology; Mr. J. J. Dowling, M.A., Lectureship in Physics; Mr. J. Bayley Butler, M.A., Lectureship in Botany; Dr. L. Werner, Lectureship in Ophthalmology; Mr. J. L. Potter, L.D.S., Lectureship in Dental Mechanics; Mr. E. Sheridan, F.R.C.S., L.D.S., Lectureship in Dental Surgery.

#### University College, Cork.

THE following appointments have been made by the Dublin Commissioners to vacant offices in University College, Cork:—

Professor of Anatomy: Dr. D. P. Fitzgerald. Professor of Archaeology: Dr. B. C. A. Windle. President. Professor of Botany: Major H. A. Cummins, M.D. Lectureship on Mental Diseases: Dr. J. J. Fitzgerald.

#### Royal Colleges of Physicians and Surgeons of Edinburgh, and Faculty of Physicians and Surgeons of Glasgow.

THE following candidates having passed the requisite examinations of the above Board in October, were admitted Diplomates in Public Health:—

Alfred B. Darling, Richard L. Bolton, Cecil C. Murison, Jamesina J. Marr, Francis W. Greaves, James B. Miller, Douglas P. Blair, Richard B. Davidson, and John Allan.

At the same sederunt the following candidates passed the First Examination in Public Health:—

Louis W. C. Macpherson, Laurence Gibson, William H. Mackenzie, Agnes E. Porter, John Reid, Byramji S. Tarapurwalla, and John Scott.

#### Royal College of Surgeons of Edinburgh—Fellowships.

AT a meeting of the College, held on the 19th inst., the following gentlemen were elected Fellows:—Alexander Allan, L.R.C.S.E.; Robert B. Anderson, M.D., L.R.C.S.E.; Walter E. Barrett, L.R.C.S.E.; Oliver Carlyle, L.R.C.S.E.; Alexander E. Chisholm, M.B., Ch.B.; Ramsay L. Daly, M.D.; Ezra N. Drier, M.D.; Charles G. Edmonston, M.B., Ch.B.; Mark S. Fraser, M.B., Ch.B., D.P.H.; John D. Harmer, M.B., Ch.B.; Robert H. Jamieson, M.B., Ch.B.; James Kirkwood, M.B., Ch.B., I.M.S.; John McCulloch, M.D.; Alexander C. B. McMurtrie, M.B., Ch.B., D.P.H.; Herbert M. Moran, M.B., C.M.; John Murdoch, M.B., Ch.B.; Frank P. Patterson, M.D.; Francis E. Price, M.R.C.S.Eng.; Vivian H. Roberts, L.R.C.S.E., I.M.S.; William Tarr, M.B., Ch.B., I.M.S.; Robert Telford, M.D.; James A. Thwaites, M.B., C.M.; and Frederick H. Wallace, M.R.C.S.Eng.

#### Society of Apothecaries of London.

THE following candidates, having passed the necessary examinations, have received the L.S.A. Diploma of the Society, entitling them to practise Medicine, Surgery, and Midwifery:—N. B. Benjafield, H. S. Brown, B. Robertshaw, S. H. Scott, and G. Tate.

#### University College Hospital—School Prizes.

THE following medical scholarships tenable at University College and at University College Hospital have been awarded: The Bucknill Scholarship, value 135 gs., to Mr. C. I. de Silva, of Colombo; entrance scholarship, value 55 gs., to Mr. R. J. Clausen, an old pupil of University College School; the Epsom Free Scholarship, to Mr. J. H. Stewart, of Epsom College.

## SUMMARY OF RECENT MEDICAL LITERATURE, ENGLISH AND FOREIGN.

*Specially compiled for THE MEDICAL PRESS AND CIRCULAR.*

**On the Treatment of Puerperal Convulsions.**—Little (*Journ. Obst. and Gyn. Brit. Emp.*, xvi. 3). Based on the review of 40 cases. Nine cases were post-partum, and 10 women were at term. The following classification is suggested:—(a) Eclampsia in patients before term, 21; (b) eclampsia in patients at term, 10; (c) in patients after confinement, 9. Thirty-two cases occurred between October and March, and it is suggested that the increased incidence at this time of year is consequent upon the difficulty of access to out-house and lavatory, and resulting tendency to chronic constipation. When a definite history could be obtained, severe epigastric pain was always noted. Observations were made in five cases on the coagulation of the blood, and all showed marked decrease to a time varying from  $2\frac{1}{2}$  to  $2\frac{3}{4}$  minutes. The time gradually increased with improvement of the patient. Four, or 10 per cent., of the cases died, which seems to justify some consideration of the treatment employed. One death was due to acute yellow atrophy, and another to cerebral thrombosis, which occurred after the patient had recovered from the toxæmia. After the occurrence of convulsions in 31 undelivered women, 15 were delivered immediately, and 16 underwent treatment before delivery; in 60 per cent. of the former and 62.5 per cent. of the latter the convulsions ceased after labour, which shows that preliminary treatment had little effect in minimising the possibility of convulsions post-partum. Of the 15 patients delivered immediately, 12 live babies were obtained, and, excluding 1 non-viable and 1 dead *in utero*, gives 92 per cent. alive. Of the other 16, 2 cases were admitted with the child dead *in utero*, and 1 child was non-viable. Of the remaining cases, 3, or 23 per cent. of children, were born alive. This shows a difference of 69 per cent. in favour of the child by immediate delivery. It seems that immediate delivery offers the best chance for both foetus and mother. If the child is dead or non-viable, temporising measures are perhaps desirable, as little is gained by delivery in these cases. Cæsarean section was not employed, and should not be seriously considered with eclampsia as the only indication. Vaginal section is only necessary if the cervix is very rigid and undilatable by other means. Forcible dilatation can be effected either instrumentally or by hand, and Harris's method has been most consistently used. The morbidity in these cases has not been any higher than the general average of all cases. When convulsions recur after delivery, or occur during the puerperium, secondary influences are assumed to be at work, the result of disordered metabolism. Suppression of urine being the rule, the skin may be made to act, and the use of hot-air baths has been a great success. Better and more effectual than sweating is bleeding, and it would seem proper to bleed until pallor or weakness of the pulse supervened, usually to 700-900 cc. The third important factor is the administration of large quantities of fluid, 200 cc. per mouth every 20 minutes. F.

**The Induction of Hyperæmia to Determine the Site of Amputation in Gangrene of the Foot.**—Lejars (*Med. Record*, September, 1909, from *La Semaine Médicale*) has used the following method in 22 cases for determining the site in spontaneous gangrene of the foot. Both lower limbs are elevated for a few minutes, and an elastic bandage is applied high on each thigh so tightly as to stop the circulation in the limb. After five minutes the bandage is removed, and the resulting hyperæmia is compared on the two sides. On the sound limb the hyperæmia appears at once, and spreads to the toes. On the gangrenous side the flush may extend to the foot, or even to the limits of the gangrene, but more often it ceases at a variable height

on the leg, or it may not descend below the knee. The level to which this hyperæmia descends marks the level to which the vessels are permeable, and thus indicates the site at which amputation may be performed. Experiments on the cadaver have shown that the permeability of the deeper vessels may be fairly accurately gauged by the limits to which the cutaneous hyperæmia extends. When the colouration ceases abruptly below the patella, it indicated thrombosis of the popliteal, or of both anterior and posterior tibial arteries. Sometimes, while the external surface of the leg remains pale, the redness may extend normally on the posterior and internal aspects of the limb. This shows that the posterior tibial artery has remained sufficiently permeable to justify amputation in the upper part of the leg by a postero-internal flap. In some cases calcification of the vessel made compression impossible, and the test was inapplicable. The procedure appears to be free from danger. No bad effects have resulted in 22 cases in which it has been performed. S.

**Herpes Febrilis on the Fingers.**—Adamson (*Brit. Journ. of Dermatology*, October, 1909) records the cases of four patients who presented this very unusual condition. The first patient was a boy of five years of age who had periodical attacks of an eruption of small vesicles on the thumb. It was thought that this was due to thumb-sucking, to which the child was addicted, but it was found that the eruption of vesicles coincided with attacks of feverish cold, and on one occasion the vesicles appeared on the fore-finger which was not sucked. The second patient was a boy of four years of age who had an eruption of vesicles on the dorsal surface of the second joint of the left index finger. The child was poorly at the time and had herpes at the skin margin of the lower lip. The third patient was a girl of eight years of age, she had during the course of an acute apical pneumonia, an attack of herpes on the dorsal surface of the index finger of the right hand. In the fourth case, the patient a girl, aged nine years, suffered from repeated attacks of herpes on the dorsal surface of the fold between the roots of the first and second fingers of the left hand. K.

**Chorea a Symptom—Not a Disease.**—Swift (*American Journ. of the Med. Sciences*, September, 1909) urges the propriety of looking on chorea as a symptom, as we do jaundice, convulsions or dropsy, and not as a definite disease. The vast majority of cases of chorea may be divided into two classes. In one of these the incoordinated movements are a symptom of some definite infection such as malaria, or infection with the pneumococcus, the bacillus typhosus or the micrococcus rheumaticus. In many such cases there is an accompanying endocarditis and myocarditis, which may result in persistent valvular disease of the heart. The treatment suitable to these patients will depend on the nature of the infecting organism, but absolute rest, physical and mental, is essential to success. In the other group of cases the causal agent is not so definite. The patients are usually young girls between the ages of seven and fourteen years, they are usually in a condition of bad health and anæmia, and have been subjected to some strain, mental or physical. The condition is quite analogous to hysteria occurring in older people. All the treatment necessary for such patients is rest, good feeding and tonics. Under such treatment they improve quickly, and as the nutrition of the central nervous system improves the child regains her lost control over the muscular movements. K.

## NOTICES TO CORRESPONDENTS, &c.

**CORRESPONDENTS** requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

### SUBSCRIPTIONS.

SUBSCRIPTIONS may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s.; post free at home or abroad. Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially-appointed agents. Indian subscriptions are Rs 15.12. Messrs. Dawson and Sons are our special agents for Canada.

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ORIGINAL ARTICLES or LETTERS intended for publication should be written on one side of the paper only and must be authenticated with the name and address of the writer, not necessarily for publication but as evidence of identity.

CONTRIBUTORS are kindly requested to send their communications, if resident in England or the Colonies, to the Editor at the London office; if resident in Ireland to the Dublin office, in order to save time in reforwarding from office to office. When sending subscriptions the same rule applies as to office; these should be addressed to the Publisher.

BARRISTER-AT-LAW.—Certainly the claim for insurance pay should be made at total incapacity rates under the circumstances you describe. A wound the size of a forin, involving the destruction of the epithelial layer of the skin, is not, of course, in itself dangerous. The risk is mainly that of septic absorption should the dressings slip on movement, and the wound become septic from that or other cause. The proper course is to lie up until the surface is covered with sound skin.

LICENTIATE IN MEDICINE.—The matter to which our correspondent refers has not escaped our notice, and will be dealt with in due course—after further inquiries have been made.

MR. J. PALMER.—Lead poisoning, as an industrial disease, is scheduled for compensation under the Workmen's Compensation Act.

EXPOSITOR.—A full list of references will be found in "Neale's Medical Digest," a copy of which is included in most medical libraries.

A. MARTERTON.—Our correspondent is thanked for his communication; the firm to which he refers has no connection with the well-known medical author of the same name.

WARDER.—Our correspondent has omitted to send his name and address.

NERVOUS INVALID.—Nearly all advertised "electrical" instruments for the cure of nervous ailments are fraudulent. Very often it is impossible to discover any electrical action in them, even by means of delicate testing instruments.

DR. SYDNEY H. HALL.—An early proof of your paper shall be sent you in due course.

MR. R. J. (Barnet).—We agree with the view entertained by our publisher, that it would be inconsistent with the principles we profess to insert your advertisement.

## Meetings of the Societies, Lectures, &c.

WEDNESDAY, OCTOBER 27TH.

HUNTERIAN SOCIETY (17 Finsbury Circus, E.C.).—8.30 p.m.: Clinical and Pathological Evening.

NORTH-EAST LONDON POST-GRADUATE COLLEGE (Prince of Wales's General Hospital, Tottenham, N.).—Clinics: 2.30 p.m.: Medical Out-patient (Dr. T. R. Whipham); Skin (Dr. G. N. Meachen); Eye (Mr. R. P. Brooks). 3 p.m.: X-Rays (Dr. H. Pirie).

MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22 Chancery Street, W.C.).—4 p.m.: Mr. M. Collier: Clinique (Surgical). 5.15 p.m.: Lecture: Dr. C. Riviere: Notes on Tuberculin Treatment.

THURSDAY, OCTOBER 28TH.

ROYAL SOCIETY OF MEDICINE (NEUROLOGICAL SECTION) (20, Hanover Square, W.).—8.30 p.m.: Presidential Address: Professor Sherrington, F.R.S.

MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22 Chancery Street, W.C.).—4 p.m.: Sir Jonathan Hutchinson: Clinique (Surgical). 5.15 p.m.: Dr. F. J. Smith: On the Examination of the Person.

HARVEIAN SOCIETY OF LONDON (Stafford Rooms, Titchborne Street, Edgware Road, W.).—8.30 p.m.: Discussion on the Influence of Mind as a Therapeutic Agent (opened by Dr. C. Shaw).

NORTH-EAST LONDON POST-GRADUATE COLLEGE (Prince of Wales's General Hospital, Tottenham, N.).—2.30 p.m.: Gynecological Operations (Dr. A. E. Giles). Clinics: Medical Out-patient (Dr. A. J. Whitting); Surgical (Mr. Carson). 3 p.m.: Medical In-patient (Dr. G. T. Chappell). 4.30 p.m.: Lecture: Mr. H. W. Carson: Perforated Gastric Ulcer.

ST. JOHN'S HOSPITAL FOR DISEASES OF THE SKIN (Leicester Square, W.C.).—6 p.m.: Chesterfield Lecture: Parvuloculides Due to Tuberculous Toxins—I, Macular; II, Papular; III, Pigmentary.

FRIDAY, OCTOBER 29TH.

ROYAL SOCIETY OF MEDICINE (BALNEOLOGICAL AND CLIMATOLOGICAL SECTION) (20, Hanover Square, W.).—6 p.m.: Presidential Address: Dr. Leonard Williams: To Redress the Balance. Paper: Dr. Eyer: The Hygiene of Naples.

ROYAL COLLEGE OF SURGEONS OF ENGLAND (Lincoln's Inn Fields, W.C.).—5 p.m.: Prof. A. Keith: Specimens illustrating Malformation of the Abdominal Wall and Irregularities in the Fixation of Viscera. (Museum Demonstration.)

MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22 Chancery Street, W.C.).—4 p.m.: Mr. H. Tod: Clinique (Ear).

NORTH-EAST LONDON POST-GRADUATE COLLEGE (Prince of Wales's General Hospital, Tottenham, N.).—10 a.m.: Clinics: Surgical Out-patient (Mr. H. Evans). 2.30 p.m.: Operations. Clinics: Medical Out-patient (Dr. A. G. Auld); Eye (Mr. R. P. Brooks). 3 p.m.: Medical In-patient (Dr. R. M. Leslie).

CENTRAL LONDON THROAT AND EAR HOSPITAL (Gray's Inn Road, W.C.).—3.45 p.m.: Lecture: Dr. Abercrombie: Pharynx and Nasopharynx.

TUESDAY, NOVEMBER 2ND.

CENTRAL LONDON THROAT AND EAR HOSPITAL.—3.45 p.m. Accessory Sinuses: Mr. Stuart Low.

ROYAL SOCIETY OF MEDICINE (THERAPEUTICAL AND PHARMACOLOGICAL SECTION) (20, Hanover Square, W.).—4.30 p.m.: Mr. David B. Lees: The Physical Signs of Incipient Pulmonary Tuberculosis, and Its Treatment by Continuous Antiseptic Inhalations, with the Results of 30 Cases. Dr. H. H. Dale: The Action of Some Diuretics.

## Appointments.

ALLAN, KENNETH BRUCE, M.B., B.S.Durh., Assistant House Surgeon at the Norfolk and Norwich Hospital.

BERGIN, W. MARMADUKE, M.B., B.S.Lond., F.R.C.S.Edin., Assistant Surgeon to the Royal Eye Hospital, Southwark.

COLLIER, JAMES, M.D., F.R.C.P.Lond., Honorary Physician to the Royal Eye Hospital, Southwark.

DODDS, H. BONAR, M.D.Edin., District Medical Officer at St. Vincent, British West Indies.

FRASER, FORBES, F.R.C.S.Eng., Honorary Surgeon to the Royal United Hospital, Bath.

HUTTON, WILLIAM K., M.A., M.B., C.M. (hons.) Glas., Lecturer on Anatomy, Queen Margaret College, Glasgow.

MCHARDY, M., F.R.C.S.Edin., Honorary Consulting Surgeon to the Royal Eye Hospital, Southwark.

FOLLARD, REGINALD, M.B.Durh., M.R.C.S.Eng., Clinical Assistant to the Chelsea Hospital for Women.

STARK, A. CAMPBELL, M.B., B.S.Lond., Assistant Surgeon to the British Skin Hospital.

## Vacancies.

Down County Infirmary.—House Surgeon. Salary £60 per annum, with board and residence. Applications to D. Smith, Registrar.

Nottingham General Dispensary.—Assistant Resident Surgeon. Salary £160, with apartments, attendance, light, and fuel. Applications to C. Cheesman, Secretary, 12, Low Pavement, Nottingham.

Clayton Hospital, Wakefield.—Senior House Surgeon. Salary £120 per annum, with board, lodging, and washing. Application to the Hon. Secretary, Clayton Hospital, Wakefield.

The Guest Hospital, Dudley.—Senior Resident Medical Officer. Salary £100 per annum, with board, residence, attendance, and washing. Applications to the Secretary.

Stamford Hill and Stoke Newington Charitable Dispensary, N.—Assistant Medical Officer. Salary £100 a year, with board and residence. Applications to the Resident Medical Officer.

Lowestoft Hospital.—House Surgeon. Salary £100 per annum, with board, lodging, and washing. Applications to E. S. Norton, Clerk, 148, London Road, Lowestoft.

Aston Union.—Resident Assistant Medical Officer. Salary £120 per annum, together with furnished apartments, rations, and washing. Applications to John North, Clerk to the Guardians, Union Offices, Vauxhall, Birmingham.

## Births.

PENNEFATHER.—On Oct. 23rd, at Deanhurst, Harrow, the wife of C. Maxwell Pennefather, M.B., B.S., of a son.

## Marriages.

JACKSON—ORMEROD.—On Oct. 20th, at St. Matthew's Church, Rastrick, Major R. W. H. Jackson, R.A.M.C., eldest son of Sir Robert Jackson, Knight, C.B., of Sandymount, co. Dublin, to Mary Beatrice, youngest daughter of the late C. J. Ormerod, Esq., of Grearoyd, Rastrick.

JAMES—BRAILEY.—On Oct. 22nd, at the Cathedral, Bombay, Thomas Leslie, son of Frederick James, of South Kensington, to Agnes Helen, only daughter of W. A. Brailey, M.D., of Old Burlington Street, London, W.

## Deaths.

BRICKWELL.—On Oct. 24th, at Pinwell, Slough, the residence of his son-in-law, Mr. John Smith Brickwell, M.R.C.S., L., in his 74th year.

EVANS.—On Oct. 15th, at 43 Cromwell Road, Hove, Henry Evans, M.R.C.S., L.R.C.P., L.S.A., after a long and painful illness.

FREELAND.—On Oct. 22nd, John Ellis Freeland, M.D., C.M.Glas., of 26 Sackville Gardens, Hove, Sussex.

FOMAN.—On Oct. 23rd, at Gate House, East Hoathly, Sussex, Thomas Holman, M.R.C.S., L.S.A., in his 72nd year.

MYERS.—On Oct. 21st, at Kent Cottage, Cleveland Road, Falinge, Henry Reynolds Myers, V.D., late Surgeon-Colonel 19th, late 37th Middlesex (Bloombury), Rifle Volunteers, in his 73rd year.

# THE MEDICAL PRESS AND CIRCULAR.

"SALUS POPULI SUPREMA LEX."

VOL. CXXXIX.

WEDNESDAY, NOVEMBER 3, 1909.

No. 18.

## NOTES AND COMMENTS.

### Again—the Suffragettes.

THE latest feat of the Amazon Suffragette suggests a steady progress of that hysterical female to the criminal climax. The throwing of tiles from roof-tops upon resident passers-by has been followed by the extremely hazardous crime of destruction by means of corrosive agents. A criminal lunatic of the class that has now grown only too painfully prevalent gained access to the polling booth and threw into the ballot-box a bottle charged with corrosive fluid. The motive of this outrage was presumably to destroy ballot papers, and it may be assumed that the incidental disfigurement of the face of an attendant official merely adds an unlooked-for item of brilliancy to the result. Coming from women who have raised a chorus of indignant fury because of the feeding of some of their number with soft tubes and broth, the disproportion of the whole thing assumes a ludicrous aspect. Tiles from house-tops and vitriol are legitimate weapons on the one side, forsooth, to injure or destroy life, while, on the other, the soft stomach tube and fluid meals are implements of refined torture, in spite of the fact that their mission is to save life. There are still petroleum and dynamite left to these women, who appear to be forsaking the traditions of English womanhood for the ways of the Continental anarchist. The state of mind of a Suffragette who uses corrosive fluid as a means of advertisement of her cause demands careful medical investigation.

### Hop-pickers and Rural Sanitation.

THE backwardness of rural sanitation in the United Kingdom is still the despair of the progressive sanitarian. It constitutes a standing menace to the health of towns, be they never so enlightened and advanced, if they are open to the constant importation of plague and pestilence of various kinds from the country. The agencies whereby the enemy gains an entrance are manifold, albeit in some cases mysterious, and in many others perhaps not even suspected. The instance of milk will occur to every reader as an easy first in the introduction of such scourges as diphtheria, foot and mouth disease, scarlet fever, enteric fever and tuberculosis, into our town populations. Of recent years a reciprocal danger has been recognised in the case of the hop-pickers. Years ago it was shown that a serious outbreak of typhoid fever at Maidstone was due to the infection of the sources of the water supply by infected hop-pickers. Some of the Midland towns are now being vexed by the appearance of that most undesirable malady in their midst. Inquiry has traced the origin of the outbreaks to hop-pickers who have returned from a certain rural district. The correspondent of one local newspaper asks the

Mayor of Dudley to have a personal examination made by the Medical Officer of Health at the incriminated farms. It seems unfair that the rate-payers of a given town should have to pay for the sins of omission of some far-off and petty rural district. A better illustration of the common interest of town and country in public health administration would be hard to find.

### Christian Science.

A CASE in the Coroner's Court at Paddington, on Friday last, illustrated the state of the law with regard to responsibility of attendants on Christian Science patients, which was explained in these columns last week. The wretched victim was an ex-colonel of the Inniskilling Fusiliers, and only fifty-five years old. His malady was varicose ulcers of the legs. Lacking medical help, the disease progressed, acute blood-poisoning supervened, and an attack of syncope brought relief in death. The widow deposed that, after thoroughly discussing the matter, her late husband had throughout declined to see a doctor. It is significant that the Christian Science practitioner is stated to have suggested towards the end, "that as many of the relatives might probably not be Christian Scientists, it would be better to call in a doctor to diagnose the case." When the patient was at the point of death a medical man was called in, and he very properly declined to certify without an inquest. Varicose ulcers in well-to-do patients under scientific treatment do not constitute a deadly disease, and the verdict of the jury that death was accelerated by lack of ordinary medical attention was no doubt a correct one. It was evident that the deceased had never had explained to him the danger in which he lay, and that simple surgical measures would have saved his life. He pinned his faith on Christian Science, and paid the extreme penalty, and the law in such cases, as we explained last week, holds all concerned blameless. To surviving relatives of this unfortunate officer not afflicted with the mental aberration which renders possible belief in a system of sordid miracle-mongering, it can afford little consolation to be assured, as they were by a Christian Science witness at the inquest, "that Christian Science never fails, but the practitioner of the Science sometimes fails through want of understanding"!

### Field Service Rations.

AN experiment just carried out on Salisbury Plain promises to provide some scientific data of the highest importance to the Army, whilst of considerable interest to the medical profession. In order to test the value of the present issue of field service rations, an officer and twenty men were selected to march for twelve days a dis-

tance of at least fourteen miles under service conditions. The men varied between twenty and thirty years of age, and, although all trained soldiers, they were not specially selected for the experiment. They carried the full equipment, which with rifle and 150 rounds of ball ammunition weighed over 56 lbs. No food other than Government rations was allowed; intoxicating liquors were forbidden, and smoking was discouraged. A minute medical examination was carried out at intervals, and the physical results are said to be satisfactory, some of the men losing flesh, but still retaining their muscular strength. The final report, which will include observations of pulsation, blood pressure, and heart affection, will be awaited with interest.

It was impossible for Professor **Professor Osler** Osler, in his address at the opening of the winter session at the London School of Tropical Medicine. School of Tropical Medicine to say anything which would sound novel in the ears of medical members of his audience. The subject has constantly held a prominent place in our columns, and our readers must be well posted up both as regards the scientific position and the practical measures that are possible, and are being carried out in the prevention of tropical diseases. Professor Osler's audience was, however, mainly non-professional, and he evidently succeeded in impressing deeply, not only the American Ambassador, who occupied the chair, but all those who had the privilege of listening to him. Professor Osler pleaded first for central organisation in dealing with the heavy burden of securing health in the Tropics, and pointed to the Sleeping Sickness Bureau, under the Royal Society's auspices, as a model. He then pleaded for funds. He pointed out how vast was the amount of work already achieved by the London School with a capital of less than £40,000. A capital of £2,000,000 would probably suffice for every requirement; and seeing that millions sterling are spent annually on church missions, it seems not unreasonable to ask for adequate endowment for the missions of science.

**The Endowment of Research.** THE Cambridge University authorities announce that Dr. R. C. Brown, of Preston, is continuing for 2 years the scholarship of £150 per annum which he founded in aid of the work of the Committee on Rheumatoid Arthritis and Allied Diseases. The *Times*, whilst dwelling upon the importance of the investigation being carried out, points out that the Committee is much hampered in its work by the want of funds, and suggests that Dr. Brown's example is one that might very generally be followed with advantage. The *Times* does not, however, say anything about the fact that the new knowledge of the disease which in so many directions is proving of such enormous advantage to mankind, is nearly all being accumulated through the self-sacrificing labours of men of science, or through endowments like that bestowed by Dr. Brown—endowments by members of a profession whose source of income is being destroyed by their own generous efforts on behalf of humanity. The State does virtually nothing for the advancement of pure science. The majority of wealthy men have seldom any conception of what is meant by research, and therefore rarely include it within the scope of their benevolence. This ignorance will be overcome only when a knowledge of at least the methods and objects of science is deemed an essential part of a liberal education. At present a great proportion of our boys pass through public schools and universities without the smallest scientific instruction of any kind whatever.

**The Modern "Octopus."** A GLANCE at the annual statistics marshalled and published by the London County Council must cause a sense akin to awe in any but the vain and small. These figures show a population of 7½ millions for greater London, and give the number of the houses at their disposal, together with the area in square miles. Next they detail the seas of water, tons of food, volumes of gas, and other necessary accessories absorbed daily by this multitude. They deal further with their comings and goings, their correspondence and their sewage, the totals mounting to millions, and sometimes to billions. Greater London looms out of this cloud of numbers like some great octopus extracting its nourishment from all quarters of the world; in fact, the compilers are fain to contrast parts with Paris and Berlin. The figures of all three cities which deal with births, deaths and marriages, tell the same tale, but each exhibits a different character. There is a continuous fall in both births and deaths, more marked, however, in the births pointing to a time when the deaths must have the advantage. There are not wanting signs that the German, having joined the rout, will soon overtake his neighbours (the fall being 2 per cent. in Berlin for 1 per cent. in London). The marriage-rate is depressed in London, but has a slightly upward tendency in Paris and Berlin. All these figures, taken with those for illegitimate births, indicate that modified meanings must be applied to such words as vitality, prosperity and respectability, or else what has happened before in history must happen again—viz., civilised man will be enthralled by a slavery caused by the number and variety of his necessities and amusements, which will eventually kill him.

## LEADING ARTICLES.

### SCHOOL CLINICS.

It could never have been the intention of the framers of the clauses of the Education Act, which empowered authorities to carry out the systematic medical inspection of school children, that mere examination and reports, not followed by measures to remedy physical defects and diseases, should be the sole result. The Board of Education, informed by its medical staff, was well aware of the existence of a large group of defects to which children are subject, and which, though undermining health, and often threatening life, do not incapacitate the sufferers from leading the ordinary life of school children. It soon became evident that reports and statistics were of very little practical value, although costing large sums to prepare, and the question next arose as to what agency could be organised for the task of dealing with the evils exposed, and whence the funds were to come to pay for the extra outlay. The question of expense is a vital one in every department of local government. The burden of imperial and local taxation is becoming heavier and heavier. In most districts the education rate has within the past few years risen from a few pence to as many shillings in the pound; burgesses recognise that it is no relief to them merely to shift the impost from local to imperial funds; they have in the end to contribute their share, albeit under another heading. The ratepayer will, however, not for long pay for things that he believes to be of no value; already there is evi-

dence that he is beginning to ask for results of a definite character for the money he spends on medical inspection; he begins to recognise that if the work is ever to become efficient, the same agency that reports on disease must take over also the task of removing it. The solution of the problem—the provision of medical and dental attendance for necessitous children—seems likely to be found in the school clinic; and permission to open such clinics under certain conditions was given in a circular issued by the Board of Education last year. At these clinics the children of the very poor can be attended free, whilst parents able to pay may be, at least, made to contribute towards the expense. The experiments in this direction made by local authorities have proved the practicability of the idea. At Bradford a clinic was opened, and it is stated that of 800 patients passed through during the first six months, 500 were cured. Some clinics have been started with the help of charitable contributions. This has been done at Bow by the London Authority co-operating with the Society for Promotion of Welfare of School Children. During the first six months 80 out of the 141 children were passed as "cured." It is not necessary to specify here the defects and maladies dealt with; there are a vast number that merely call for systematic simple treatment or minor operations. The dental clinic at Cambridge, mentioned on several occasions in our pages, which is also supported partly by the authority, partly by voluntary contributions, has shown what can be done to put an end to conditions looked upon too often as unimportant, although frequently in themselves enough to lower the standard of health to danger-point. The advantage of a clinic in dealing with other simple maladies has been shown in the case of favus. This disease, taken systematically in hand at the London Favus School, was stamped out in three years. It seems evident that, even in the sordid sense of the word, it will pay the State to incur a considerable annual outlay, if by that means it can reduce the burden it now bears owing to the existence of an army of unemployables, incapable in consequence solely of the neglected defects and diseases of childhood.

## CURRENT TOPICS.

### A Medical Hero.

FROM time to time the heart of the medical profession is stirred to its depths by the news of the heroism of one of its fellow workers. The most recent incident of the kind comes from Darran Colliery, about two miles from Bargoed, in South Wales. Early on Friday morning last a violent explosion occurred shortly before the workers on the night shift were timed to leave their work. The ordinary approach to the mine was completely blocked, and the only means of access to the scene of the disaster was through the shaft of another pit four miles away. Soon after the news reached the latter spot, a relief party, headed by Mr. M. Bowen, the general manager, Dr. Turner, the colliery surgeon, and others, descended the shaft and fought their way towards the other pit. One by one they were overcome by the choke-

damp, which was described by one authority as having been the most deadly ever known. Five of these heroes, including the manager, were overcome by the fumes and died. Dr. Turner had a narrow escape. He is described as having repeatedly risked his life in heading the relief party. At length he collapsed, and his followers succeeded in reaching him, but were so overcome by the deadly gas that they were compelled to abandon the doctor to his fate. His death was regarded as certain, but after a while these brave men resolved to return. After walking a quarter of a mile they found Dr. Turner lying in the roadway, still alive. He was carried to a place of safety where oxygen was administered, and he was later conveyed in a comatose condition to Cardiff Infirmary. A deed of this kind deserves the enthusiastic recognition of the whole medical profession, who may well be proud of this South Wales colliery surgeon. The loss of life from the explosion is estimated at twenty-nine, including five rescuers.

### Death from Sea-Sickness.

ALTHOUGH sea-sickness is usually regarded as a subject especially fitted for humorous treatment, it is well to remember that there is also a serious side to the question. Not long ago a man of thirty-five years of age died as the result of sea-sickness during the voyage from Plymouth to Cork. The voyage, which usually takes about a day and a half, was prolonged by a gale, and the steamer was delayed some twenty-four hours. The unfortunate man's sufferings were so great that he appears to have expired while being transferred from the ship to the hospital. Curiously, his former occupation was that of a naval stoker, which he relinquished some time back on account of deafness. It is a well-known fact that even seasoned sailors will at times get sea-sick when exposed to some seas, notably, to the curious roll often experienced in the Carribean Sea. Numerous cases of death from sea-sickness have been recorded. In some cases the untoward result appears to be due to simple exhaustion in otherwise robust persons, in others to rupture of an aneurysm or perforation of a gastric ulcer, while others are the result of shock and exhaustion in individuals who are enfeebled from various organic diseases. It is somewhat curious that medical science has never found a really satisfactory remedy for this distressing malady.

### Sir Victor Horsley and Anæsthetics.

IN his remarks to the students of the London School of Dental Surgery, a week or two ago, Sir Victor Horsley dealt with the relation of dentists to the administration of anæsthetics in a less convincing fashion than is usual with that strenuous thinker. As his views are likely to carry weight from the deserved respect given to Sir Victor Horsley's opinion, it is necessary to inquire whether his argument is quite sound. He was asked, he said, What was a licentiate in dental surgery qualified for? He replied, dentistry, and inasmuch as dentistry could not be carried on without anæsthesia, then it followed that a dentist must be qualified as an anæsthetist. But does it follow? Does Sir Victor suggest that dentistry cannot be carried on unless the dentist himself administers the anæsthetic? This would be very pernicious teaching, if it were not so far removed



from fact. It would be no less absurd to say that the surgeon must be a qualified nurse. Or, to put it further, we might argue that, inasmuch as Sir Victor Horsley's practice cannot be carried on without the aid of railway-trains, it follows that Sir Victor is a qualified engine-driver. On another point, we think Sir Victor's remarks equally open to criticism. In speaking of the administration of chloroform, he stated that as soon as chloroform was given by dose, and not by haphazard open methods, practical safety would be attained. If there is really any evidence to this effect, it should be brought forward, but at present the statement is quite in the air. Moreover, as we have before remarked, there is no reason to believe that chloroform can be administered by dose, for there is no means of knowing how much chloroform is absorbed, even if the percentage in the air be known. However, if Sir Victor be right, a clockwork machine would be the safest of anæsthetics. In our opinion, whenever reliance is placed on perfection apparatus rather than on individual skill and attention, there is grave danger to the patient, and in so far as it is taught that chloroform by any mechanical contrivance can be rendered a "safe" anæsthetic, in so far lives are endangered.

#### The National University of Ireland.

THE lists published in the issue of last week of the appointments made to University College, Dublin, and University College, Cork, almost complete the teaching staff of the new National University. As far as the medical schools are concerned, except for one or two minor appointments, the teaching staffs are now complete. We are glad to congratulate the University on the way in which the appointments have been made, and the fact that the schools are so strongly manned. As far as University College is concerned, it draws most of its staff from the Catholic University School, in Cecilia Street, as was to be expected. The gentlemen who have, under great difficulties, maintained the reputation of that School, will now have a chance of building up a school under more favourable conditions. It is possible that in some of the appointments local influence of the candidates was given too much weight, but, on the other hand, we know that in some cases the Commissioners held out firmly against strong local claims. We wish the University every success in its career.

#### International Conference on Leprosy.

As our readers interested in the question are aware, Dr. Arthur Newsholme and Sir Malcolm Morris were appointed delegates of the British Government to the Conference on Leprosy, held at Bergen, in August last. After the Conference the British and Colonial delegates met, and drew up a statement, and in a Parliamentary Paper issued within the last few days Dr. Newsholme and Sir Malcolm Morris recapitulated the resolutions unanimously adopted in August, and add their own recommendations as to the line of administrative policy needed for the prevention of leprosy within the British Empire. A policy of prevention can only be solidly based on a knowledge of the causation of the disease. In this connection it is interesting to note that, contrary to the strenuous advocacy of Sir Jonathan Hutchinson, the authors

of the Report declare positively that leprosy is not due to the eating of fish, or any particular food; but beyond the statement that the disease is spread by direct and indirect contagion the Report throws no light on its ætiology. The suggestion is made that indirect contagion may be effected by fleas, bugs, lice, and such parasites; and it is pointed out that personal and domestic filth and overcrowding, with close and protracted association between the leprosy and non-leprosy favour the spread of the disease. The Report recommends compulsory notification and segregation in settlements or asylums, and the authors believe that if effectually carried out these recommendations alone will provide the most efficient means of mitigating suffering and assisting recovery, and at the same time will produce a reduction and ultimate extinction of the disease. The Bergen Report had previously affirmed that leprosy was curable, and although no certain remedy is at present available, it is possible that science may in time discover a specific remedy.

#### A Universal Races Congress.

To the making of Congresses there is no end; the latest assumes the title which heads this paragraph, and is to be held in July, 1911. The object of the Congress is officially stated to be the discussion of the larger racial issues in the light of modern knowledge and the modern conscience, with a view to encouraging a good understanding, friendly feeling, and hearty co-operation among races and nations. Political issues of the hour will be subordinated to this comprehensive end, in the firm belief that when once mutual respect is established, difficulties of every type will be sympathetically approached and readily solved. Although the truly formidable cosmopolitan list of professors and men of science who lend their names to this project is calculated to put fear into the heart of a critic, we cannot forbear from setting forth the suggestion that from the scientific point of view the Congress does not seem very practical or very hopeful. In the first place, it may be asked, are there any longer any distinct races to be discovered in Europe, or, at any rate, in Western Europe? As De Foe playfully suggested, it is so very easy to distinguish your Saxon, Danish, Roman, Norman, English. For some thousands of years at least the blood of every European people has been gradually mingling, not only with that of their neighbours, but with that of peaceful and warlike invaders from the remotest parts of the Continent. The British Isles have formed practically the remotest and most difficult of access of all European lands; and yet from what diverse stocks do the present inhabitants spring. Assuming that any pure races ever existed in Europe—an assumption by no means proved—the British of to-day are an amalgam of all those races. Race and nationality are two very different things; and because language, religion, and customs clearly separate the various peoples, it does not at all follow that they can be sorted out and labelled under a truly scientific racial nomenclature.

#### The Foods and Drugs Acts.

MORE than one London daily paper is now giving much space to consideration of the question

of adulteration of foods and drugs. They show very clearly, as we have so often pointed out, that the laws for prevention of adulteration are at present almost complete failures. Their failure justifies John Bright in the opposition he offered to the passing of the first Bills through Parliament. He contended that the evils could never be put an end to until the moral qualities of manufacturers and merchants were so raised that they would no longer be capable of making money by palming off upon the public products, not only faked and inferior, but capable of seriously affecting the health of the consumers. The *Daily News* and the *Daily Express* devote long articles to showing how the laws are evaded, not only with regard to luxuries like wine, but also the common necessities of life, the purity of which is essential to the poor consumer. They show how preservatives are abused, and how, for instance, milk, on its way from the cow to the customer, is, to a vast extent, so dosed with boracic acid as to be converted into a positively poisonous mixture capable of producing deadly results in infants and the aged, whose lives depend upon an adequate supply of the pure article. Our contemporaries do not, however, refer to the fact that the administration of the Acts is in the hands of local authorities, and that, either from parsimony—a desire to keep down the rates—or from self-interest—they are often dominated by small tradesmen, these bodies very commonly ignore the Acts altogether, or, at most, use them in a partial perfunctory fashion. In a great number of urban and rural districts the department of sanitary inspection is defective, there are no officers to take samples, and no provision is made for analysing them, even if they were taken. It is difficult to see what practical effect is likely to be produced by the newspaper articles to which we refer; but it is at least important that the facts should be made widely known among the public.

## PERSONAL.

THE KING has expressed a wish to visit the Lynn Hospital Art Loan Exhibition. As Saturday next, November 6th, is the earliest date on which His Majesty can fulfil the engagement, the exhibition, which was to have closed to-day, will be kept open until that date.

MR. JOHN D. ROCKEFELLER has just set aside a fund of £250,000 in order to fight the "hookworm."

DR. W. A. WINTER, F.R.C.P.I., has been elected Visiting Physician to Dr. Steevens' Hospital, Dublin.

ON October 20th a bronze memorial tablet was unveiled in the chapel of King's College Hospital to the late Professor Lionel S. Beale.

DR. NORMAN MOORE, Physician to St. Bartholomew's Hospital, has been elected to an honorary Fellowship of St. Catherine's College, Cambridge.

ON October 19th Sir T. Clifford Allbutt visited his birthplace, Dewsbury, to open a new nursing home and operating theatre for the Dewsbury Infirmary.

AT the Gwyn Hall, Neath, on October 26th, Dr. J. W. Thomas, the ex-Mayor, was the recipient of a service of plate in recognition of his public work.

MR. ROBERT JONES, a Liverpool surgeon, has won the Liston Prize of £100.

MR. H. T. BUTLIN, D.C.L., F.R.C.S., President of the Royal College of Surgeons of England, has been nominated President-elect of the British Medical Association.

MR. F. E. SMITH, M.P., was formally elected President of the National Pure Food Association, at a meeting held at the Royal Society of Medicine, Hanover Square, on October 28th.

DR. ANTON BREINL, Director of the Runcorn Research Laboratories of the Liverpool School of Tropical Medicine, has been selected to take charge of the newly-formed School of Tropical Medicine in Queensland.

MR. CHARLES BALLANCE, M.V.O., M.S., F.R.C.S., will deliver an address entitled "The Lesson to be Learnt from the History of the Mastoid Operation," at the Central London Throat and Ear Hospital, on November 8th next.

AT Rugby, Mr. T. Johnston, M.R.C.S.Eng., has been presented with a marble clock as a mark of respect and esteem by the members of the Ancient Order of Druids, of which he is a Past Arch, on the occasion of his leaving Rugby to take up a practice in Hove.

DR. J. C. MOTTRAM, Mr. Bryden Glendinning, and Mr. Somerville Hastings have been reappointed to the "Richard Hollins," "Walter Emden," and "Salters' Company" scholarships respectively for a period of one year in the Middlesex Hospital Cancer Research Laboratories.

DR. TURNER, of Deri, who, with commendable pluck, descended the coal pit in South Wales to administer restoratives, is recovering from his exposure to the gases he inhaled. It has also been reported that one of Dr. Turner's shoulders has been dislocated, possibly in the efforts made to save him.

AT a meeting of the Special Election Committee of the Queen's Hospital, Birmingham, held on October 26th, under the chairmanship of Mr. H. F. Keep, Dr. Joseph George Emmanuel was appointed Hon. Physician to fill the vacancy caused by the death of Dr. Foxwell.

DR. JOHN E. JONES, J.P., of Dolgelly, whose death was recently announced in these columns, has left £27,533 personalty; and Dr. Hubert E. J. Biss, Assistant Editor of this journal, whose brilliant career was cut short last month, at the early age of 37, has left personalty valued for probate at £3,731.

DR. JAS. A. LINDSAY, Professor of the Theory and Practice of Medicine, Belfast University, delivered the Bradshaw Lecture, yesterday, at the Royal College of Physicians, London, the subject being "Darwinism and Medicine." We hope to publish this lecture in our next. At the same College, Sir T. Clifford Allbutt will deliver to-morrow the Fitzpatrick Lecture on "Greek Medicine in Rome."

LIEUT.-COL. H. CARR, on arrival from England, is to command Station Hospital, Jullundur; Lieut.-Col. J. V. Salvage, on arrival from England, is to command Station Hospital, Ferozepore; Lieut.-Col. T. Daly is to command Station Hospital, Dalhousie, from March 1st next; Major H. N. Dunn is to command Station Hospital, Dagshai, from March 1st next; Major R. F. E. Austin, on arrival from England, is to command Station Hospital, Jutogh.

# A CLINICAL LECTURE

## ON

### SUPPURATION IN THE ACCESSORY NASAL SINUSES. (a)

By JAMES DONELAN, M.Ch., M.B.,

Chevalier of the Crown of Italy; Laryngologist to the Italian Hospital, London.

#### PART I.

IN selecting suppuration of the accessory sinuses of the nose as the subject of a lecture before qualified and experienced medical men, one has first to consider what aspects of it are likely to be of interest to one's audience. Naturally, one would not attempt to treat so vast a subject fully in a single lecture. On the other hand, in discussing suppuration in cavities so closely associated that one may infect all, and where none can be considered as regards diagnosis without reference to the others, it is very difficult to make a selection. It has seemed to me that my attempt to employ usefully the time at our disposal would be more likely to attain some measure of success if I were to confine myself to setting before you a brief account of the causes, symptoms, and diagnosis of sinus suppuration in general. It would take us too far back in the genesis of chronic suppuration of the sinuses to speak in detail of the acute or sub-acute inflammations that precede it. It may be said at once that the greatest number of these troubles arise from infectious diseases, while those due to constitutional states or extension of neighbouring pathological processes are much rarer.

A long list of these diseases has been contributed by various investigators. It includes influenza, diphtheria, facial erysipelas, croupous pneumonia, enteric, scarlatina, measles, small-pox, cerebro-spinal meningitis, and tuberculosis. Of these only influenza and diphtheria have been proved exciting causes, while on the ground of cases reported by Hajek, of Vienna, and others, it is probable that facial erysipelas may be classed with them. To these should be added attacks of "acute catarrh" of at present unascertained origin.

Influenza must be regarded as the principal causative agent. Linderthal showed in 1897 that the bacillus is almost constantly found in the pus from the sinuses, and very often isolated. Other writers have proved that this organism alone is capable of setting up sinus inflammation and suppuration, and that the other germs so often found—*e.g.*, *D. pneumonia*, *Staph. pyogenes* *an. et alb.*, *Streptococcus*, and *B. coli* are only of secondary importance. The more frequent reports of suppuration in the sinuses in the last 20 years are therefore based not only on improved means of diagnosis, but actually on a much greater amount of material resulting from the frequent recurrence of epidemic influenza.

Of the other organisms I will refer only to the *D. pneumonia* and tuberculosis. The mention of the diplococcus recalls the interesting discussion in which Fränkel championed it as the great cause of sinus suppuration. Fränkel's later researches have shown that the *D. pneumonia* is a common inhabitant of perfectly normal sinuses. He found it in 28 out of 40 perfectly normal cavities, so that it would seem that pathological conditions occur not so much from the mere presence of the organism as from its sudden multiplication.

**Tuberculosis.**—It may be worth while mentioning that, while primary tuberculosis of the mucous membrane of the sinuses is an extremely rare condition, it is somewhat remarkable that Fränkel and Wertheim found sinus inflammation in 33 per cent. of persons who had died of tuberculosis. Tubercle should very likely be regarded as one of the general predisposing causes.

While the preceding are the principal causes of primary inflammation and suppuration of the sinuses, suppuration may also be secondary to other influences. These are, (1) traumatism, and (2) extension of primary diseases from the bony walls.

(1) Trauma of the walls, accompanied by bleeding into the mucous membrane and cavity, affects, as a rule, only the superficial sinuses, frontal and maxillary.

The infectious agent may be conveyed by the injury, or may be already in the sinus, and infect the blood extravasated.

(2) The diseases that may extend from the bony walls include:—

(a) Periosteal and sub-periosteal abscess from dental caries, causing suppuration in maxillary antrum in a large minority of the cases seen.

(b) Syphilis of bony walls.

(c) Primary tubercle of bony walls.

(d) Malignant neoplasms—*e.g.*, empyema of maxillary sinus in connection with cancer of its wall.

It has been a fruitful subject of discussion whether sinus suppuration is more frequently of independent origin, or is always secondary to a nasal affection. The greater weight of evidence, both anatomical and clinical, appears to support the view that it is usually an extension from the nose, and that even where no changes can be observed in the nasal mucous membrane the initial nasal inflammation may have been so slight as to leave no trace.

The most important feature in the mechanism of these diseases is the condition of the outlets, as it almost constantly determines why, in a series of cases of sinus inflammation, some get well spontaneously, while in others chronic suppuration is established.

The following case may serve to illustrate this and some other points:—

A man, æt. 27, seen at the end of December, 1905, had a history of attacks of acute nasal catarrh, with headaches mostly on left side, for several years. Had four attacks of influenza in preceding five years, with severe frontal headache and yellowish discharge from nose, chiefly left side. Two months before he was seen by me had similar influenzal attack; the headache and discharge of thick, yellowish, muco-purulent matter continued, with painful sensation of pressure at root and along dorsum of nose, feeling of tension in left orbit, and almost constant flow of tears from the left eye.

On examination, there were general congestion of the nasal mucous membrane on both sides, yellow muco-purulent discharge in both middle meatus, which recurred rapidly after removal on the left side, not so rapidly on the right.

No recurrence in the olfactory fissure once cleansed. There was a marked difference in the form of the right and left middle meatus. On the right, the middle turbinal was almost normal but for congested coverings; the posterior end of the hiatus semilunaris could be seen. On the left the middle turbinal was much swollen, out-curved, blocking the middle meatus except at anterior end. Between these rhinoscopic findings and the symptoms there was a distinct correspondence; there was also tenderness on percussion of anterior walls of the frontal sinuses, especially the left; on this side there was also sharp pain on pressure of the inner part of upper wall of orbit and over the lachrymal bone. Transillumination showed obscurity over both frontal sinuses and obscurity over left maxillary antrum as compared with its fellow.

(a) Delivered at the Medical Graduates' College and Polytechnic, London, Oct. 5th, 1909.

The treatment consisted in irrigation with tepid alkaline aseptic solutions, and internally, in view of the recent influenza, strong doses of Tr. cinchonæ co. with the decoction, which I have found more useful in post-influenzal conditions than the exhibition of a sulphate of a single alkaloid such as quinine. Within a week the right side got well spontaneously. On the left side, however, the discharge, swelling, and external tenderness continued. As the pain over the left frontal sinus and the orbital tension were increasing, the anterior half of the middle turbinal was removed under local anæsthesia and ischæmia by scissors and snare. The passage of a probe from the hiatus into the infundibulum was followed by a free outflow of pus, and immediate relief of the frontal pain. The probe was next passed into the ostium of the anterior ethmoidal cells for about half an inch, and its withdrawal was followed by a free flow of offensive pus. A test puncture in the inferior meatus of the maxillary antrum showed no pus. The patient made a good recovery, and was seen a few months ago, having had no recurrence of his trouble.

The precise diagnosis in so many of these cases must necessarily be *ex post facto* as regards the removal of part of the middle turbinal, covering the sinus outlets. Before this was done, however, there was good reason to suspect acute influenzal inflammation and suppuration of both frontal sinuses, and probably on the left side implication of the anterior ethmoidal cells as well. Though this is a type of case of almost everyday occurrence, there are several points about it which deserve further analysis as illustrating the mechanism of sinus suppuration, its general tendency to spontaneous healing, and why, notwithstanding that tendency, so many cases become chronic.

Taking first the right side, we learn that spontaneous cure even of such a recessed cavity as the frontal sinus, with its tortuous channel, may take place. It can scarcely be claimed that the irrigation had any direct influence on the abscess other than in favouring its discharge by diminishing the congestion and swelling of the margins of the hiatus semilunaris. That there is nothing extraordinary about such spontaneous cures has been proved over and over again by numerous writers. On the contrary, there is a well-established general tendency to spontaneous recovery with normal structures, otherwise every common cold or influenza would place us in danger of severe sinus troubles or dangerous complications. The practical inference is that expectant treatment should be carried out for a reasonable time if there is no aggravation of the symptoms, before deciding on any operative measures. I have seen many cases, and many have been reported, in which the symptoms disappeared without operation in from four to six weeks.

It is not, however, the spontaneous recovery of the right side in this case that claims our interest so much as the failure to recover without operation on the left. Why do not all cases heal spontaneously? Hajek says:—"The answer to this question illuminates the whole mechanism of sinus empyema." In the vast majority of cases the condition of the outlets determines whether spontaneous healing shall or shall not take place. Other factors there are which shall be mentioned, but this is the most important.

At an early stage of the systematic study of these affections Zuckerkandl recognised the importance of this question, and attempted to answer it on anatomical grounds. He pointed out that, owing to the varying calibre of the infundibulum and ostia of the sinuses, free drainage did not always occur. Moreover, septal deflection, or, as in the case before us, rolling of the middle turbinal outwards on itself, tended to impede the outflow. Further experience has amply confirmed this view, as does the more frequent affection of the maxillary antrum, its mode of drainage in the erect position of the head being less favourable than that of the other sinuses. But while one recognises the work of so many patient investigators, one cannot lose sight of the fact that it is only a tardy application to the nasal accessory sinuses by the general principles of surgery of a principle as old as the days of Hippocrates. The reason is that before the days of local anæsthesia, and especially ischæmia,

progress was practically impossible. How does the obstacle to free drainage occur, and how does it favour suppuration? If we refer to the history of this young man, we see that he had been for a good many years liable to attacks of nasal catarrh, and that on the left side it was frequently associated with symptoms of retention. We may leave the right side out of the question in view of the spontaneous recovery, and regard the attack as an acute empyema of a normal cavity. On the left side the conditions were not normal; there was the middle turbinal curving outwards and obstructing the middle meatus. The mucous membrane of the outer concave side of the middle turbinal is of much looser structure than on the mesial surface, as is that of the middle meatus generally, and is peculiarly liable to cedematous swelling under irritation. It is very likely that he had for years a chronic catarrh of his left frontal sinus, as well as also of his left anterior ethmoidal cells, the acute attacks being exacerbations of this condition. The abnormal secretion caused the oedema, with permanent hypertrophy tending to block the middle meatus more and more with each attack. It was not necessary that the obstruction should be complete. In this case we see the outlets must have been quite sufficient, since the removal of the covering portion of the middle turbinal definitely freed them. There was, however, sufficient obstruction to cause more or less stasis of secretion, and this, by not allowing the mucous membrane to come to rest between the acute attacks, the catarrh became chronic, and a favourable landing-place was prepared for the influenza invasion. Even with patent outlets of good size, stasis of secretion or retention of pus may occur if the secretion is very thick.

We pass now to the grounds on which suppuration of the left anterior ethmoidal cells was suspected. There was a recurrence of pus more rapidly and in greater quantity after cleansing on the left side. There was tenderness over the left lachrymal bone, increased lachrymation, tension in the left orbit, and a feeling of dull tenderness at the root of the nose along the upper part of its dorsum. The difference in the flow of pus on the two sides may be dismissed at once as valueless, as no inference can be drawn from that as to which sinus may be affected. The only symptoms of value were the increased lachrymation, the tenderness over the lachrymal bone, and the peculiar feelings about the nose. The last are discounted considerably by the concurrent symptoms of frontal suppuration, while tenderness over the lachrymal bone and the increased lachrymation remain to suggest the participation of the anterior ethmoidal cells in the process. Tenderness on pressure over the lachrymal bone is only confirmatory when present, as Hajek found it absent in 50 per cent. of ascertained ethmoidal empyemata. A somewhat similar view may be taken of the value of transillumination. In this case both frontal sinuses showed equally dark or equally translucent, and no definite opinion could be formed as a result of the use of that aid to diagnosis in the region where it is most likely to be useful.

With regard to suppuration in the maxillary antrum, it is of little service compared with test puncture in the inferior meatus, owing to the varying conditions of the antrum, and its walls on opposite sides.

Transillumination may be looked on in this connection in much the same light as the non-discovery of the B. tuberculosis in the sputum of a suspected tubercular. It is all very well if it helps to confirm a diagnosis arrived at by other means, but even distinct contrast of translucence is not always evidence that suppuration is present. Cases have occurred where even the normal frontal sinus has been opened through a misleading transillumination.

Another point about this case is the history of repeated attacks. This can generally be elicited on careful inquiry in most cases of sinus suppuration that have become chronic. We have also to notice that a test puncture was made into the left maxillary antrum through the inferior meatus, and that no pus was found.

This showed not only that the suppuration had not its source in the antrum, but that there was a con-

dition termed pyosinus, in which the antrum often serves as a reservoir for the pus from the cavities affected in this case. The normal sphenoidal sinus also occasionally is a reservoir for pus from the posterior ethmoidal cells.

A definite diagnosis as to the source of the pus in suspected disease of the upper sinuses can in general be made only on exposing the ostia by removal of the anterior, or, in the case of the sphenoidal sinus, the posterior part of the middle turbinal.

From this we may also gather some of the criteria that enable one to decide whether or when operative interference is necessary: On the right side no such measures were required. On the left, the permanent tendency to stasis would doubtless have led to chronicity on this or some future occasion if the acute frontal symptoms had not rendered the removal of the obstructing portion of the turbinal necessary.

Apart from the mechanical causes favouring chronicity in this case, there is in many others a general tendency for the acute attack to become chronic. This may be due to various factors, such as unusual intensity of the infection, unusual susceptibility of the mucous membrane, tubercle, syphilis (apart from any definite lesion) of the sinuses, dusty atmosphere, overcrowding, and repeated attacks of inflammation. A history of repeated attacks, as in the case before us, is most frequently obtained with regard to the frontal sinus, as such attacks are rarely overlooked by the patient. It is not so frequently ascertained with regard to the sphenoidal sinus, and least frequently in the case of the maxillary antrum.

The consideration of the foregoing case in illustration of the outlets has induced me to use it in connection with various other points that seemed to arise out of it. I have, as far as possible, avoided comment on the subjective symptoms, as I wish now to say something of the general symptoms of sinus suppuration. These are usually classed as (a) local, (b) general, and (c) those due to complications which I propose to omit, as the complications arising from sinus disease will be fully treated by my friend, Dr. Dundas Grant, in a lecture on October 25th. The local symptoms are those arising from changes in the sinuses themselves, or those caused by the abnormal secretion. They are—(1) headache, (2) secretion of muco-pus or pus, (3) loss of smell, (4) symptoms due to secondary affections of the upper air passages, (5) disturbances of digestion.

(1) Headache, though not always present, is a frequent symptom of acute and chronic sinus trouble. In the latter it arises partly from exacerbations of the chronic inflammation, and is partly a sign of the occurrence of retention from increased obstruction of the outlets. It is usually aggravated by bodily or mental effort, and by the immoderate use of alcohol or tobacco. Its connection with sinus trouble is very often overlooked, and many patients who have suffered from chronic headache for many years, and tried all sorts of "cures" and treatments without effect, have been completely cured by the drainage of an overlooked sinus empyema. Headache is, of course, by no means pathognomonic of sinus mischief, any more than it is of anæmia, nephritis, or even cerebral disease. One has to be cautious as to the prognosis for the headache, even after the successful draining of one or more suppurating sinuses, as, owing to some concurrent affection, the headache may persist as badly as ever. This suggests the reflection that in examining a nose or other individual organ one should never forget the man that owns it, but should at least, in all doubtful cases, make a general examination, or have a report from a reliable colleague. The character of the headache is most variable, but certain types may be recognised.

Headache varies as it occurs in connection with acute attacks of sinus suppuration, or with chronic disease.

(To be concluded in our next.)

NOTE.—A Clinical Lecture by a well-known teacher appears in each number of this journal. The lecture for next week will be by James Donelan, M.Ch., M.B.,

*Chevalier of the Crown of Italy, Laryngologist to the Italian Hospital, London. Subject: "Suppuration in the Accessory Nasal Sinuses." Part II.*

## ORIGINAL PAPERS.

### HÆMATEMESIS AND ITS SURGICAL TREATMENT,

ILLUSTRATED BY NOTES OF TWO CASES.

By WILLIAM TAYLOR, M.B.DUB. UNIV.,  
F.R.C.S.I.

Surgeon to the Meath Hospital and Co. Dublin Infirmary.

THE treatment of hæmatemesis, the result of gastric and duodenal ulceration, is of such vital importance in many instances that I venture to record the following two cases which occurred in my practice in the early part of the summer.

CASE 1.—Miss E., æt. 50, was taken ill at 3 a.m. with a feeling of faintness, followed soon afterwards by nausea and vomiting. The vomitus contained a quantity of blood mixed with some food *débris*. At 9 a.m. she got a similar attack and vomited about 10 ounces of bright red liquid blood.

Until six weeks before this attack she had always enjoyed good health, but, during these six weeks she complained of indigestion, for which she was dieting herself.

Seen after the second hæmorrhage she was pale and collapsed. Her pulse was about 120 and feeble, though regular. She did not complain of pain. The abdomen was soft and flaccid. There was nothing abnormal to be detected on palpation. There was not a trace of muscular rigidity or induration. The tongue was clean, enlarged, flabby and indented at the sides. She was removed to hospital as soon as possible and at 12 noon the abdomen was opened, as I felt convinced that a recurrence of bleeding of a similar nature would be fatal. The abdomen opened, the stomach seemed normal in every respect. There was not a trace of a chronic ulcer to be seen or felt. The stomach wall was then incised for about three inches, so as to permit the interior to be examined. It was only after a most careful and methodical examination of the entire interior of the stomach by everting it like a glove that we found three small ulcers extending into the submucous coat on the posterior wall, high up towards the œsophageal end. In the centre of the largest of these ulcers the open mouth of the artery from which the hæmorrhage occurred was easily seen and demonstrated to those present.

The vessel was fairly large, and its lumen was about as large as would readily admit the end of a small knitting-needle. A purse-string suture of fine silk was inserted round the ulcer and tied tightly, so as to occlude the artery. A second suture was passed deeply through the wall of the stomach underneath the ulcer, and tied firmly over the artery. The anterior gastric incision was then closed, and a posterior gastro-enterostomy performed in the usual way. The subsequent course of the case was uneventful, recovery was rapid, and the lady is now in the enjoyment of perfect health.

CASE 2 is that of a man, who came under my care at the same time as the lady whose case has just been detailed. He was admitted into the Meath Hospital with a very clear history of

a chronic gastric ulcer. He had been ill on and off for many years and occasionally had coffee-ground vomiting. Some time prior to his admission into hospital he had an exacerbation of pain and vomited almost everything he swallowed; even milk used to cause pain.

He used to relieve the pain by taking bread-soda, and when bread-soda was not available he had recourse to the use of his finger for inducing vomiting. Two days before seeking admission into hospital he vomited a quantity of blood. He certainly looked as if he had lost a considerable amount of blood, for his pallor was most striking. On examination there was well-marked rigidity of the recti muscles above the umbilicus—the right rectus was the more rigid. On palpation over the epigastrium he complained of tenderness, but, there was no induration to be detected on account of the muscular rigidity.

Considering the long and distinct history of ulcer the patient related to us, we determined to perform a posterior-gastroenterostomy upon him as soon as he could be properly prepared for operation.

His teeth were very bad and his mouth was generally in a very septic state.

On the day following his admission, while in the hospital a message was brought to me saying that the man had vomited a large quantity of blood, and was in a very bad state. On going into the ward to see him I found the floor around his bed simply covered with blood and blood clots. The patient was lying in a collapsed state in the bed, and very pale. As soon as everything could be got ready for operation he was brought into the operating theatre and his abdomen was opened in the usual manner.

An indurated mass about as large as a hen's egg, was found extending from the pylorus along the lesser curvature and upwards towards the liver, to which it was adherent. There were adhesions posteriorly as well, so that it was impossible to bring the stomach without the abdominal wound. An incision was made into the stomach just as in the former case. The ulcer was readily seen. It occupied the interior of the indurated mass just mentioned, and was filled up with blood clots. The blood was sponged out, but careful search failed to reveal the vessel from which the hæmorrhage had taken place. As it was presumably a large vessel and as it was likely the bleeding would occur unless the vessel was ligatured, and as it could not be seen it was decided to try and occlude the vessels along the lesser curvature, both left and right of the indurated mass, and thus we hoped to be able to secure the source of the bleeding.

With two fingers of my left hand inside the ulcer to act as a guide, I passed a curved needle threaded with a strong cat-gut ligature, through the entire thickness of the stomach walls to the left of the ulcer. The needle passed through from the anterior to the posterior wall, and the ligature was then tied by my assistant over the lesser curvature. In a similar manner a suture was passed and tied to the right of the ulcer, which was close to the pylorus.

As nothing further could be done directly to arrest the hæmorrhage from the ulcer, the wound into the stomach was closed and a posterior gastro-enterostomy was performed. Morphia was freely given afterwards. The patient vomited some blood on one occasion after the operation,

but otherwise his recovery was uninterrupted and complete. He can now eat anything he likes without pain or discomfort.

Both these cases are interesting, the former because it is the type of case in which we are generally told in text-books, operation is quite unnecessary, as such cases recover completely under purely medical treatment.

From the size of the vessel which was the source of the bleeding in the case of this lady, as demonstrated at the operation, from the rapidity with which the second hæmorrhage followed upon the first—less than seven hours—and from the amount of blood lost by these two hæmorrhages, I am quite convinced that the bleeding would have recurred and that another such hæmorrhage would have been fatal.

The second case is of interest on account of the nature of the procedure adopted to arrest the hæmorrhage. Judging from previous experiences of repeated copious hæmorrhages in cases with histories of old-standing gastric or duodenal ulcers, one is justified in concluding that operation in this case was the means of saving the patient's life, but, whether the result would have been as satisfactory if we had contented ourselves with the performance of a posterior gastro-enterostomy alone, when we failed to detect the actual source of the hæmorrhage, instead of adopting the method we did, must remain open to question.

At all events it added nothing to the risk of the posterior-gastro-enterostomy, while it must, at least, be admitted that it closed two probable sources of hæmorrhage and, having regard to the situation of the ulcer, the odds are greatly in favour of the bleeding having come from the coronary or pyloric arteries, or some of their branches. I have seen five cases of death from hæmorrhage due to chronic ulceration of the stomach. In four of these I saw the post-mortem examination, and saw the opening into the vessel from which the fatal bleeding took place. The fifth case was also verified by post-mortem examination, of which I was informed at the time, but I did not see it myself. I also know of at least seven other cases that died from hæmorrhage from gastric or duodenal ulcers, within the past three or four years. In four of the five cases on which autopsies were made in the Meath Hospital, operation would have been attended by a fair prospect of success if undertaken in time, as the ulcers were easy of access, and with the stomach opened there would have been little or no difficulty in securing the bleeding vessel.

In the fifth case operation could scarcely have been successful. The ulcer was extensively adherent to the pancreas and it was the splenic artery that was opened. It ought to be quite unnecessary for me to add that it is an absolute impossibility to form any opinion when a patient is seen after a hæmorrhage as to whether the bleeding is coming from such a vessel as could be ligatured, or, as to whether the ulcer is so situated that one could get at it or incise it and thus arrest the hæmorrhage.

These are facts that can only be found out by operation or post-mortem examination.

If such a condition as would render an operation futile, so far as the arrest of the hæmorrhage is concerned, and is discovered after opening the abdo-



men, the patient will not be one whit the worse off so far as his chances of recovery are concerned, provided the operation is undertaken in reasonable time, while the physician and surgeon will at all events have the satisfaction of knowing they did what lay in their power to save the patient's life. It may be some consolation to a medical man, who sees a patient after one of these serious gastric hæmorrhages and who postpones operation in the hope that the bleeding will not recur, or delays for a more favourable opportunity, which unfortunately does not present itself—when the post-mortem examination is made and it is discovered that operation could have been of little if any avail in arresting the bleeding.

On the other hand, what would be the feelings of such a man if the autopsy were to show him that the hæmorrhage could have been arrested thereby greatly increasing the prospects of saving the patient's life?

I am convinced that one should not hesitate to operate in a case of severe hæmatemesis or melæna occurring in the case of one who gives a clear history of chronic gastric or duodenal ulceration, provided the patient is not so exanguinated and collapsed as to make it clear that operation in itself must hasten the fatal issue. It is in such a case as that of the lady already detailed that one might perhaps, justifiably, hesitate. There was not by any means a clear history of ulceration in her case, and certainly not a chronic ulcer, still she complained of what she described as "indigestion" for some six weeks, but, there was no sign or symptom of ulceration, save that of slight pain and discomfort after eating—there was no vomiting, and no muscular rigidity.

To sum up, I would urge the advisability of operation in every case of copious bleeding—even after the first hæmorrhage—when there is a clear history to be obtained of chronic gastric or duodenal ulceration. I would also urge the advisability of operating in any case of recurrent serious bleeding, especially if the second hæmorrhage recurred in a short time in anyone who gave a history of even a few weeks' severe indigestion, but who exhibited no other evidence of chronic ulceration. Recurrent slight hæmatemesis of coffee-ground character in connection with chronic ulceration does not necessitate in itself an operation for its arrest. It is, however, an evidence of the presence of a chronic ulcer, which sooner or later may terminate in a fatal hæmorrhage, in perforation or in the development of cancer, and as such it is an indication that an operation which may be termed one of convenience should be undertaken for the cure of the ulceration. Lastly, one should never operate for hæmatemesis occurring in the young anæmic woman, who never exhibited any distinct evidences of gastric ulceration. An operation in such a case simply adds a serious complication to a condition which will readily recover under medical treatment.

### ON REMOVAL OF THE NORMAL APPENDIX.

By H. A. LEDIARD, M.D., F.R.C.S.,

Surgeon to the Cumberland Infirmary.

IN order to facilitate reference to what follows, I make the proposition "that it is a wise and

prudent precaution to remove the healthy or normal appendix in childhood," and I shall endeavour to justify my thesis by the arguments which compose this paper.

To dwell upon the universality of such a common disease as appendicitis, or the number of victims claimed each year, would seem to be a useless task, because all surgeons, physicians and general practitioners have their own practical experience of the frequency of appendicitis in their own practices or in their districts. This practical experience cannot be expressed in figures, for obvious reasons, so that I go to a Blue Book—a source of information which is open to everyone, whether professional or layman. Truth has been stated to be relative rather than absolute, and this holds good for statistics of mortalities, found in the columns of the Registrar-General's Report, which contains an enormous mass of information, which year by year becomes more interesting, accurate, and more practically useful. For example, it was not until the beginning of the present century that the deaths from appendicitis were separately given in the official tables, so that it is now possible to read the number of deaths each year attributable to this cause. The mortality from appendicitis in the last six years has averaged 63 per million in males and 41 per million in females. (a) In both sexes deaths are recorded at all ages, but for the most part the mortality has been highest between the tenth and the twentieth year. Deaths at the age of three to six months and of over 75 years are included. At page 30 of the Report it will be seen that in 1906, 2,144 persons of all ages died of appendicitis in England and Wales. Now, if 2,144 persons died, how many suffered from the same disease and recovered? How many girls, boys, men and women had their school work, their holidays, their employments, or their household duties or pleasures interrupted, spoiled or ruined by an attack of the disease, with or without an operation superadded?

It would be an impossible task to estimate the loss of time and labour by the patients who contract appendicitis and yet make good recoveries, and so estimate the total number of the males and females recovering or dying of this disease. Statistics of operations upon those recovering are not to be had, except partially, in the reports published by the hospitals of the United Kingdom. It is therefore only from the Registrar-General that some idea can be had of the amount of appendicitis in the country. The total amount may be larger or smaller than I care to state, but a day will come when the total number of persons attacked will be better known than it is at present.

What is the value of the appendix to the possessor?

What function does the appendix perform?

Is the appendix missed when it has been removed by the surgeon?

These questions will be answered one by one.

The appendix is of no value to its possessor at all; it represents something wanted during the embryonic stage of the growth of the human species and some other animals, but something not required during the independent life of man; that is to say, that an infant boy or girl has no more use for the appendix than a man of 75 or 85 years of age. It performs no function, or functionates so slightly that the amount is a negligible quantity. No one misses it when it is away, no one knows that he has one until it becomes diseased. On the other hand, it has been proved beyond doubt, before it was ever operated upon, to have been a

(a) See Registrar-General's Report for England and Wales for 1908: p. 461.

trap to catch all sorts of extraneous articles taken by the mouth as food or otherwise. A *cul-de-sac*, a blind alley, in which pins, shot, seeds, concretions, threads, hairs, bits of bone, metal, etc., etc., are caught and imprisoned, and freed only when perforation has been induced by the irritation such foreign bodies create.

Some have imagined that the appendix is in an unexplained manner useful in the human economy, because, being there, it of course has some special value, which we, in our ignorance, are unable to trace. I am not of those holding the good or hidden good of the appendix, because the death-roll seems to speak plainly in the other direction.

The appendix performs no function, is of no value to the possessor of one, and has never in the widest world been missed after it has been removed. What then?

My answer is as follows: The Jews, according to their religion, performed an operation, which Christians in all countries are found adopting of their own instance. Circumcision—an operation done on boy babies for sanitary reasons only—is submitted to, is solicited by parents, and is performed by medical practitioners all over the world. If circumcision is believed to be an improvement on human anatomy, are there not other improvements which may be of rather more general application and done for stronger reasons?

If circumcision is a useful, justifiable, and civilised procedure, the same would hold good for appendectomy, and the more so because the reasons for circumcision do not embrace death, whereas the removal of the appendix would save in one year 2,144 lives, and render safe from attack all the other persons seized with appendicitis, the number of whom it would be impossible to calculate with accuracy.

Perhaps the reader of this paper will receive a shock—very likely he may; but what of the shock if his child, at the age of 5, dies, after a ten days' illness of appendicitis and an operation thrown in? It has been shown that no age, tender or advanced, is exempt from the liability to death from appendicitis, and it has been demonstrated that between 10 and 20 years the highest mortality has been recorded. I therefore counsel the early excision of the normal appendix at the earliest possible age, girls and boys to be dealt with on terms of equality. It is clear that it would be imprudent to take each and every child indiscriminately, at an early age, say, under 12 months, for operation, but a healthy infant could quite well be submitted for normal appendectomy, with a benefit lasting for a lifetime, and the removal of a cause of illness and of death for ever. When one thinks over the valuable lives of men and women, lives valued by friends and relations, no less than by the village, town, city or district in which they have lived, the question of submitting an infant to such an operation as removal of the normal appendix shrinks into insignificance.

But here a point is reached with which it is somewhat difficult to deal, viz., the risk of operation.

It will be admitted at once that the risks of some appendix operations are most grave, because the operation is undertaken when risk to life is already present, and sometimes, indeed often, when the condition is absolutely mortal apart from any operation. These conditions would not be present in normal appendectomy, and, given skill in the use of anæsthetics, given skill in operating, given safety in surroundings, and given a healthy child to start with, it may be said that normal appendectomy is without danger and almost without risk.

The advantages obtained by a successfully-performed normal appendectomy would mean life-

long safety from one of the most troublesome and dangerous forms of disease with which the physician or the surgeon has to deal. Occasionally it has been found that the physician has more progressive ideas than the surgeon who puts on the white gown, and ladies have been met with who are infinitely more progressive and up-to-date than their own family doctors, but there is no surgeon in the wide world with any experience of appendicitis, perforated appendix, gangrenous appendicitis, appendix abscess, local or diffused, who will not be prepared to advise, to recommend, nay, even urge, the reasonableness of getting in front of these unpleasantnesses, to leave alone mortalities, by removing the normal appendix at the earliest possible and feasible age.

In place of a sudden panic, a helter-skelter rush, and the general upset caused by a hasty operation, so often necessitated in appendicitis, a time is selected, a convenient day is chosen, and normal appendectomy is done with the same calmness and deliberation as a vaccination. A day will come when views such as these will be accepted and adopted. In conclusion, a word or two is added about the money expended, the pains taken, the suffering endured, the patience exhibited, upon the vast number of semi-worthless objects which crowd our hospitals. Humanity requires us to be as careful of an ultra-tubercular patient as of the most vegetable forms of lunacy found in our asylums. Go on with the expense, the suffering, the patience and the pains by all means, but why not make a beginning at the other end, why not prevent the possible expense, the suffering, the anxiety, the almost terror of a possible operation at an uncertain period of life, by removal of the appendix when it is sound, when the individual is healthy, and when the procedure can be conducted with an almost absolute certainty of immediate success?

The wound of a normally removed appendix is healed in ten days, and a fortnight's confinement to bed would be the average time absorbed, whereas the wound of an appendix abscess in a favourable case will take, on an average, six weeks.

Less doctoring, less nursing, less worry, less confusion in the two weeks than in the six. Less interruption of business for both sexes, at an operation done at from 6 to 18 months than at an operation from 15 to 30 years of age.

An infant has to be fed, clothed, fresh-aired, taught and doctored. If it has crooked legs they are straightened, if it has a hare-lip or a split palate, these defects are seen to; if the child is ruptured the sac is removed, if there is an ugly nævus on the face this is removed, and so on with a variety of complaints or malformations which do not threaten the life of the child either immediately or in the future, except as regards appearance and possible success or entry into certain walks of life, such as the army, navy, civil service, and a variety of other employments where those having some kind of defect are weeded out.

Probably many surgeons and physicians have thought over the proposal made in this paper, but they may have hesitated to place their views on record, they may have been reluctant to recommend such a "fire-guard" against the risks of appendicitis, and have been contented to allow the risks to go until the individual runs up against them. I am here suggesting a course of action to physicians and surgeons and general practitioners, as the outcome of no little experience in hospital, private, and consulting practice, and my experience is common enough.

As years go on there will be less and less seen of the "too late" cases of appendicitis. Diagnosis will be more quickly made, and surgical interfer-

ence sought for at an earlier moment than it often is at present; the general public will be better informed of the need for early attention to abdominal colic, which may prove the innocent commencement of a fatal perforation or gangrene of the appendix, and, in consequence, call in medical or surgical aid at a more seasonable hour than is sometimes now the case, but all this will not check the attacks of the disease, although the mortality may be reduced. Furthermore, the general public may even go so far as to desire that risk of appendicitis may be removed by the early removal of the appendix, and in this manner meet the surgeon half way.

Finally, there are men who are seated in academical positions of authority, who have the teaching of the rising physicians and surgeons of the next and following decades—what do they say to the proposal?

### QUACKERY LAW.

By G. F. DARKER, M.R.C.S., L.R.C.P., D.P.H.,  
Barrister-at-Law.

THE able articles by Dr. D. Walsh in THE MEDICAL PRESS AND CIRCULAR have drawn attention to the evolution of the law with regard to quacks. The little book brought out recently by the British Medical Association on "Secret Remedies, What they Cost and What they Contain," and referred to by Dr. Walsh, well nigh completes the subject. There remains, however, the question, what is the actual position to-day with regard to patent medicine vendors, the medical profession and the public? There are three distinct societies which one naturally looks to when considering patent medicines and the like. 1, The Pharmaceutical Society; 2, the Apothecaries' Hall; 3, the Royal Colleges of the Physicians and Surgeons.

In practice it appears to come to this:—The Pharmaceutical Society can act if a person holds out that he is a member of the Pharmaceutical Society, and he is not, or if a person sells things that are poisons within the Pharmacy Acts, and he is not properly registered under the Acts. (It has, as has been pointed out, power to advise the King in Council what shall be considered a poison and put in the schedule of the Pharmacy Acts.)

The Apothecaries' Hall can take proceedings against anyone who "compounds and prescribes" medicines for internal or medical use. The Hall cannot, so it has been held, interfere where the treatment has been for a surgical case (bone in toe, for example).

The Royal College of Surgeons of England gives protection to its Fellows and members where liable to be prosecuted for maiming the King's subjects. How far any other surgical qualification gives the same protection is perhaps of academic rather than practical interest.

The Royal College of Physicians of London have rights which they do not use, and possibly could be stopped from using now if they did.

There remains the Public Health Authorities, who might take proceedings under the Food and Drugs Act a little oftener than they do. And, finally, there is left the common law of England, together with the Sale of Goods Act, where an aggrieved party can sue for damages for breach of warranty or fraud, or even prosecute criminally in some cases.

Now, how do the Courts view cases concerning patent medicines? They apply, and rightly apply, the maxim that the plaintiff or prosecutor must prove his case, while they bear in mind the law relating to patent medicines, which seems to be that anyone who procures a licence can retail

patent medicines, but the exemption is restricted to medicines which are protected by letters patent under the Great Seal, and does not apply to proprietary medicines. Sales by wholesale dealers are dealt with under 31 and 32 Vict., c. 121.

### THE ETHICS OF JOURNALISM IN RELATION TO QUACKERY.

By HENRY SEWILL, M.R.C.S. ENG.

TWO episodes in the story of contemporary journalism which have occurred within the past week or so may serve as a text for some observations which perhaps you will allow me to make. The first episode is referred to in the fourth of the series of able papers by Dr. Walsh on "Quacks and the Public Health," printed in THE MEDICAL PRESS AND CIRCULAR of October 20th. Inquiry will, I believe, show that the British Medical Association's authoritative exposure of the character of the quack medicine trade in their pamphlet, "Secret Remedies," has been passed over unnoticed by the vast majority of London and provincial papers, whilst a considerable number, including those whose columns are filled with quack advertisements—papers, moreover, that circulate mostly among the poorer classes—have not only ignored a subject so extremely important to their readers, whose interest they profess to have at heart, but have refused to publish the advertisement of the pamphlet through which the wretched victims of quackery might gain the knowledge they so sadly lack. One can only here repeat the quietly forcible phrases of the *British Medical Journal*. Since the papers alluded to "assign no reason for refusal of the advertisement, the suggestion that it is in fear of offending the quack drug sellers is permissible. It is not an incident of which the British Press can feel proud, but it is one of which the medical profession must take note."

For at least thirty years in your columns, in those of your medical contemporaries, and latterly through the British Medical Association, I have on every occasion insisted upon the fact that the newspaper Press must be held most responsible for the rapid growth of quackery until now, when it has become one of the greatest evils of the kind afflicting society.

I have always pointed out that it is by the aid of newspaper advertisements that quackery flourishes. I divide newspapers in this connection into several classes. There are some that reject fraudulent advertisements; some that insert them innocently; some that insert them carelessly, and very many more that insert them knowingly. The number of those least blameworthy has diminished largely during late years. This is perhaps due to the fact that many have been converted into companies, which as corporations intent upon money-making, are capable of conduct in business which would be repugnant to shareholders if acting individually for themselves. This change in management of papers has led to the stultification of many editors. They have continued to denounce quackery whilst every kind of quack advertisement was being published in their own pages. I speak both of London and provincial papers claiming to stand in the front rank of journalism. I have in my possession a number of leading articles exposing and denouncing quackery in general, and single practitioners, and puffs of the same quackery from the same papers. I would particularly refer to a long and special article published a few months ago in one of the foremost papers of the day. It dwelt upon the injury to the national health arising from the use of quack medicines. It referred to the harm done by sham tonics containing alcohol and narcotics; and described the deadly results which often follow reliance upon quack medicines where organic disease existed, as for example, when an "indigestion cure" containing nothing but a coarse purgative, is relied upon in a case of gastric ulcer. From this same paper I have preserved an enormous advertisement of an "indigestion cure," the character of which had been

more than once exposed in the Law Courts, and the case reported in all the chief papers of the day. I examined a number of copies of the newspapers alluded to and found that they each contained quack advertisements, the cost together of which would be about £200; so that if these issues afforded a fair sample of the quack advertisement department of this paper, its income would amount to at least £50,000 a year from this source. More than a million sterling is being annually expended in quack advertisements. Advertisements in leading papers are often printed in a form which the ingenuous reader must mistake for editorial. This example has naturally led to the demoralisation of many inferior papers, and these now supply without question their endorsement to the false statements of any pretender prepared to pay for sham editorial notices; their pages are crowded with fraudulent puffs in the form of editorial paragraphs. It is not necessary for my purpose that I should do more than briefly refer to the fact that the conduct of many papers, including some claiming to stand in the front rank, has been the same in relation with commercial dishonesty. I have in my possession at least one editorial article from one of the foremost papers of the day, which elaborately exposed and denounced a system of swindling carried on some time ago by a gang of City sharks. It is amazing, but true, that the advertisements of this firm appeared throughout the whole of its existence in the paper I allude to; they were printed in a form more or less closely imitating editorial matter in scores of leading papers throughout the country; they must have cost many thousands of pounds—a measure of the profits made by their authors. The character of the advertisements, as the article in the paper I allude to pointed out, was unmistakable by any man of the world: it could not have been mistaken by astute newspaper managers, who did not scruple thus to take part in plundering and perhaps ruining a great number of simple and confiding people. Incidents of this kind, by no means uncommon, suggest that it is at least necessary to free one's mind from cant when considering that great institution the British Press.

The second of the episodes to which I alluded at the opening of my paper occurred quite recently. A theatre manager wrote to the *Westminster Gazette* a letter which the editor—it matters not to my point whether rightly or wrongly—construed into a threat to withdraw the advertisements of a theatre on the ground that unfavourable criticism of a new play had been published in the *Gazette*. The editor resented this alleged affront; he took it as a suggestion that his paper was to be coerced or bribed in a matter in which independent expression of its opinion was the only honourable course—the suggestion, in fact, that its theatrical criticism should be reduced to the quality of merely paid puffery. The question was taken up by the *Times*. In a clever, characteristic article by its dramatic critic, the leading paper dealt scornfully, sarcastically, and ironically with the idea that great journals could be supposed to have so degraded a standard of honour. The amazing thing about this episode is the ignorance which the editors of the two great papers seem to display with regard to the code of ethics of the bulk of their contemporaries. The *Times* and the *Westminster Gazette* are papers of unblemished honour. They sacrifice a great income by refusing to print certain classes of puffs freely admitted into the majority of papers, even including some which would reject with scorn the suggestion that they did not stand in the front rank of journalism. Every large advertiser is aware that in return for money payment he can obtain either sham or real favourable editorial notices of any enterprise, whether of equivocal character or above suspicion, in the majority of papers; and it is not to be wondered at if occasionally a man of business shows himself unable to discriminate. If really great papers like the *Times* and *Westminster Gazette* wish to safeguard themselves against what in their cases would be gross and gratuitous insults, they must strive to raise the moral standard of the bulk of their contemporaries so that it may no longer constitute a degradation to be asso-

ciated with or confounded with them in the mind of the general public.

## OPERATING THEATRES.

### GREAT NORTHERN HOSPITAL.

UNDIAGNOSED FEMORAL HERNIA.—MR. PEYTON BEALE operated on a labourer, æt. 30, who had just been admitted suffering from acute intestinal obstruction of three days' duration only. He had faecal vomiting, very great abdominal distension, pulse thready and too rapid to count, respiration very laboured, aspect cyanosed. It was therefore evident that operative procedures must be at once undertaken, though from the man's appearance and condition, hope of recovery was exceedingly remote. The patient's history was that two days previously he was seized with sudden pain in the right side of the abdomen, coming on after breakfast; he had not been doing any heavy work; the pain rapidly increased; he had been given numerous purgatives, but the bowels had not acted at all. On examination there was nothing definite to be made out; the inguinal and femoral regions on both sides were very carefully investigated, and, as the pain began on the right side of the abdomen, laparotomy was performed in that region. On introducing the hand into the abdomen and exploring the right side of the pelvis a knuckle of bowel was felt projecting through the femoral ring. By means of gentle traction the bowel was easily reduced, and was then found to be a portion of the ileum, about seven-eighths of its lumen having been forced through the femoral ring, the aperture of which was just large enough to admit the tip of the little finger, so that, strictly speaking, as Mr. Beale pointed out, it should be called a Richter's hernia, although the obstruction was absolutely complete. On withdrawing the strangulated portion from the abdomen, it was seen to be very little changed from its normal appearance; it was slightly injected, but not otherwise discoloured. The abdomen contained a certain amount of slightly blood-stained fluid, and this was rapidly washed out with hot salt solution. The wound was dressed, a small gauze plug being inserted.

Mr. Beale said that he had met with two similar cases at the same hospital during the last year, that is to say, in each one there was a strangulated Richter's hernia, and there was absolutely no evidence of it from the outside; in fact, in each case, all those who had examined the patient, both on admission and before operation, had remarked that whatever the cause of obstruction might be, it was not a strangulated inguinal or femoral hernia. This remark shows very pointedly how in each case the symptoms the patient presented were absolutely typical of strangulated hernia.

The patient, unfortunately, died about three hours after operation, and this, Mr. Beale remarked, shows how extraordinarily severe an acute intestinal obstruction of three days' duration, due to a strangulated Richter's hernia, may be. It should be remembered, he said, that it is not uncommon to find a strangulated inguinal or femoral hernia causing symptoms of acute obstruction, which may be termed comparatively slight, that is to say, not much distension, vomiting not becoming faecal within six or ten days, and the patient in a fairly good condition even at the end of that time.

### KING'S COLLEGE HOSPITAL.

ABSCESS IN THE RIGHT ILIAC REGION DUE TO MALIGNANT DISEASE OF THE CÆCUM.—MR. PEYTON BEALE operated on a man, æt. 30, who had been admitted with an obvious abscess in the right iliac region. The history was of some months' duration, but lately the temperature had risen to over 100, and the man's general condition had become much worse, so he was sent into hospital for immediate operation. The case was assumed to be one of suppurative appendicitis, and the usual operation was performed. A localised abscess was opened, and about half-a-pint of exceedingly offensive pus escaped. The cavity was explored gently with the finger, and its walls every-

where seemed to be smooth. Care was taken not to break down any adhesions or to enlarge the cavity in any way. The wound was irrigated with hot salt solution, and during the process it was evident that only a small quantity of the lotion introduced came out. On observing this, Mr. Beale remarked that he was pretty sure that the case was not one of appendicitis: it was clearly a *B. coli* abscess, and very likely was the result of an infection of a malignant tumour in relation to the colon.

After the operation there was a continued discharge of offensive pus from the wound, and some hours afterwards the lotion which had been lost escaped per rectum. The man steadily got worse, and was never in a fit condition to undergo further operative measures; he soon died, and at the post-mortem it was found that he had a large colloid malignant growth involving the whole of the caput cæci and appendix. The abscess had been in the centre of the growth, and this accounted for the smoothness of the cavity when examined at the time of the operation. The cæcal valves, of course, permitted the fluid to pass into the colon and prevented its regurgitation into the wound which had been made. Several coils of small intestine were found adhering to the colloid mass.

## TRANSACTIONS OF SOCIETIES.

### ROYAL SOCIETY OF MEDICINE.

#### SECTION FOR THE STUDY OF DISEASE IN CHILDREN.

MEETING HELD FRIDAY, OCTOBER 22ND, 1909.

Dr. G. A. SUTHERLAND in the Chair.

Two cases of "Anterior Poliomyelitis Involving the Four Limbs" were shown by Dr. A. MANUEL. The first was a child, aged one year and eight months, in whom the condition developed suddenly after a slight injury. The child's temperature when brought to the hospital was 100 F., and all four limbs were paralysed. Some improvement had occurred in the arms since the child was admitted. The second case was a child, æt. 1, in whom the condition resulted from a sudden illness on August 15th, considerable recovery in the arms had already occurred, but there was still complete paralysis of all the extensors of the foot and leg.

A case of "Extra-Capsular Fracture of the Neck of the Femur" in a boy, æt. 6, was shown by Mr. RALPH THOMPSON. The injury had resulted from a fall. The diagnosis was at first very obscure, but a skiagram revealed the true nature of the injury. The case had been treated by extension and Thomas's hip splint.

Mr. MUMMERY said that this injury was very seldom diagnosed in children, but some of the cases of obscure deformity of the hip-joint were very possibly due to a similar injury.

Case of "Congenital Hemidystrophy" was shown for Mr. HOWELL EVANS by Dr. HIGGS. The patient was a child, aged one year and ten months. When only a month old it was noticed that the left side of the tongue was larger than the right, and later that there was asymmetry of the abdomen. At the present time a marked difference can be observed between the sizes of the two sides of the body. It was pointed out that the condition in this case was progressive.

Dr. PARKES-WEBER regarded the case as one of hemihypertrophy of muscular origin.

Mr. LOCKHART MUMMERY reminded the Section of a similar case which he showed two years previously. He considered the condition as being a progressive one, and likely to lead to great deformity.

A case of "Chloroma" was shown by Dr. ESSEX WYNTER. The patient was a female, æt. 3½, showing very marked facial deformity, which had been noticed since the middle of May. The face is

unusually large and bony, with shiny, tense skin over the malar bones, and marked exophthalmia, especially on the right side. The glands about the neck were enlarged. The blood count showed red corpuscles 3,630,000; white, 30,000; hæmoglobin, 56 per cent.; and lymphocytes, 66.2 per cent.

The CHAIRMAN said that he assumed that secondary tumours of the suprarenal capsule could be excluded.

Dr. WHIPPHAM asked where the growths commenced, and Dr. LANGMEAD whether the diagnosis from lymphatic leukæmia had been gone into?

Dr. SPRIGGS mentioned a similar case of his own, and said that he was not convinced by the blood count.

Mr. SYDNEY STEPHENSON recalled a case in which the child was suffering from secondary deposit from suprarenal sarcoma.

A case for "Diagnosis" was shown by Mr. LOCKHART MUMMERY. The patient was a boy, æt. 6½, with a spastic gait and very marked contraction of both tendo achillis. He was only able to walk on the tips of his toes.

Dr. SPRIGGS referred to a similar case which had been regarded as one of hypertonia.

Dr. JEWSDURY pointed out that the case might be one of diplegia, as there were well marked knee-jerks and Babinski's sign was obtainable.

Dr. HIGGS regarded the case as one of spastic paraplegia.

Dr. SUTHERLAND pointed out that there should be in that case some mental defect.

Mr. MUMMERY, in reply, said that there was no evidence of any mental defect.

A communication, entitled "Notes on the Pathology of some Liver Conditions in Childhood with a report of three cases," was made by Dr. A. DINGWALL-FORDYCE.

The first case was that of a child, æt. 7, with sub-acute yellow atrophy of the liver. A year ago the child had an attack of jaundice, and since then had complained of pain in the left side of the abdomen. Seven weeks before death the child began to look ill, and the abdomen was noticed to be swelling. There was diarrhoea and vomiting, œdema of the back, paresis of the left leg and left side of the face, and a squint. Temperature 99 F., pulse 144. The post-mortem showed slight pleurisy and pericarditis. There was some bile-stained fluid in the peritoneal cavity. The stomach was dilated, and in the ascending colon there was an acute tubercular ulcer. The liver was greatly reduced in size and almost flat, and its surface was irregular with well-marked yellow nodules. Microscopic examination showed yellow areas of hyperplasia and much fibrous tissue.

Case 2 was a female, æt. 8, who was admitted to the hospital with caries of the dorsal spine. She died of persistent vomiting a few days after admission. The post-mortem examination revealed a fatty condition of the liver, which weighed 460 grammes.

Case 3 was a male, aged four years and eight months. The child was first seen on account of digestive troubles, and on examination it was noticed that the liver was much enlarged. The child died after an operation, which revealed malignant disease of the liver. Post-mortem examination, the liver was found to weigh 4½ lbs., and to be studded throughout with new growth. A tumour was discovered in the ileum, about one foot from its lower end. The kidneys were enlarged.

A case of "Lympho-Sarcomatosis" was shown by Dr. F. W. HIGGS. It revealed a specimen of an appendix infiltrated with lympho-sarcoma. The kidneys also showed diffuse infiltration with lympho-sarcoma cells.

The specimen from a case of "Acute Inflammation in an Appendix, involuted into the Lumen of the Cæcum, which then formed the Apex of an Intussusception," was shown by Mr. IVOR BACK. The specimen was removed from a girl, æt. 8, by operation, the child recovering. It showed an appendix completely involuted into the cæcum, and markedly inflamed. No explanation as to the origin of the condition was offered.

Dr. WALTER CARR read a paper entitled  
A CASE OF PNEUMOCOCCAL INFECTION IN AN INFANT  
SIMULATING GENERALISED TUBERCULOSIS.

The patient was a child, aged 15 months, who was admitted to hospital with an indefinite history of illness. The case was at first thought to be one of acute pneumonia, but when after several weeks the condition remained unaltered with an irregular temperature it was thought to be one of general tuberculosis. Calmette's test gave a negative result. The child died, and the autopsy revealed no trace of tubercle, but a general pneumococcal infection. There was well-marked pericarditis. The right lung was universally adherent, and the upper lobe showed old unresolved pneumonia, the left lung was also adherent. The peritoneal cavity contained about a pint of semi-purulent fluid.

Dr. SUTHERLAND said he regarded the case as a very unusual one.

#### OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.

MEETING HELD (AT THE ROOMS OF THE MEDICAL  
SOCIETY OF LONDON) ON THURSDAY, OCT. 21ST, 1909.

The new President, Dr. G. A. BERRY, in the Chair.

Mr. N. BISHOP HARMAN showed a new retractor for use in excision of the lachrymal sac, also two sisters with symmetrical discoid cataract.

Mr. BROOKSBANK JAMES showed a case with very unusual fundus appearances.

Mr. HERBERT FISHER a case of marginal bilateral keratactasia.

Mr. GRIMSDALE showed a case of retraction of the eyes associated with the act of winking.

#### PRESIDENTIAL ADDRESS.

The PRESIDENT then delivered his address. He was more and more impressed with the truth of the maxim, "*Quot homines tot sententiae*," and it was often educating and inspiring to realise the steps which had led to the great advances, and to get some idea of the manner of thinking and the surroundings of the authors. Nothing was so fascinating as the history of medicine. More than mere rediscoveries could be claimed for present advances; they were new, and were logical deductions from carefully collected observations and experiments, not merely irresponsible speculations. The practical man was an empiric, but now the science of medicine had overtaken and greatly outstripped the art. There were many reasons for treatment lagging behind; practical therapeutics was one of the most imperfect of the arts. Surgery was perhaps least subject to individuality, and it was in that domain that the most advances had recently been made in treatment. But the advances following upon antiseptic surgery had led to an over-confidence in, and too frequent recourse to, surgery, and that tendency was no doubt favoured by the public. That, however, was a mere swing of the pendulum, and would right itself in time. The eye was an organ whose functional activity could be estimated with every refinement. The possibility of suggestion in treatment did not occur to most patients, and one sometimes received most congratulation from those for whom one was conscious of having done the least. There had not been anything commensurate with the advance of general surgery in the sphere of ophthalmology, though there had been greater skill, and the incisions had been cleaner than formerly. The eventual results of operations for cataract were probably the same in all cases. Dr. Berry then entered into a historical retrospect of the methods of operating for cataract, and asked whether finality had yet been reached in the matter. He thought it would be admitted that something better was at least conceivable; there might be cure without operation, and even prevention altogether. And, useful as iridectomy was in the treatment of glaucoma, advance might yet be made in that respect. Nearly all the surgical interference in use for trachoma had their prototypes in ancient times. The treatment which gave the best

results in the more severe chronic cases was now often employed in cases where it became an unnecessary mutilation. Dealing with the incursion of the optician into the realm of ophthalmology, he deprecated that because he could not detect or appreciate underlying eye disease. Dr. Berry went on to speak of the history of the invention of spectacles, as well as of the history of mydriatics, which latter means he thought had been much abused. The advantages of inducing hyperæmia had long been known, and now Bier had placed the matter on a scientific basis. In conclusion, he said he was a believer in a great future for medicine, both preventive and remedial; treatment by sera and anti-bodies and every stimulant form of remedy opened up a vast vista for the future.

#### PEDIGREE CHARTS.

Mr. PRIESTLEY SMITH read two papers: (1) A note on the making of pedigree charts; (2) A pedigree of congenital discoid cataract. The latter almost confirmed Mendel's law.

The PRESIDENT and Mr. NETTLESHIP congratulated the author on his papers.

Mr. NETTLESHIP discussed Mr. Smith's proposals for recording pedigrees, and said the second paper dealt with the largest pedigree of that disease which had ever been recorded.

Mr. R. W. DOYNE said he had observed "Coppock" cataracts for the last 26 years, and 25 years ago he worked out a long series of three generations, all of which were handed over to Dr. Ogilvie when he elaborated his paper. He had formed a rather strong suspicion that as the years advanced the cataract became more dense. In the "Coppock" cases the most advanced of all was one of the three brothers, and the faintest were in young children. One girl, now a schoolmistress, he examined when she was quite a child, and saw her again recently, and he thought the condition had progressed.

Mr. HERBERT FISHER said that recently a case of discoid cataract which was under Mr. Nettleship 16 years ago came to hospital, and there was now no further deterioration in vision.

Mr. TREACHER COLLINS questioned the advisability of using the term discoid cataract for these cases, as this form of cataract was known as the "Coppock." Discoid had been applied to the form of opacity in which the lens was flattened from before backwards.

Mr. PRIESTLEY SMITH, in reply, said it would be very useful if those following up the subject were to give the names of the people, as he believed there was a migration to town, and some supposedly isolated cases might be shown to be connected.

#### LIVERPOOL MEDICAL INSTITUTION.

MEETING HELD OCTOBER 21ST, 1909.

Dr. T. HOLLAND in the Chair.

#### CASES.

Dr. J. HILL ABRAM read a case of "polycythæmia megalosplenica" in a male.

Drs. STOOKES and E. E. GLYNN related a case of ACCIDENTAL HÆMORRHAGE AND CHRONIC URÆMIA, in which *B. proteus* was found. The woman was 28 years of age, and in her fifth pregnancy; had accidental hæmorrhage for eight days at the sixth month. She died 11 days after with symptoms of uræmia. On post-mortem examination numerous small anæmic infarctions were found in the cortex of the kidneys. Cultures made from kidneys and spleen showed *B. proteus vulgaris*. The uterus contained staphylococcus aureus.

Mr. FRANK JEANS read a paper on PERFORATIVE PERITONITIS, with illustrative cases. The paper was based on 10 consecutive cases on which he had operated for perforative general peritonitis. There were 2 cases of perforated duodenal ulcer, and 8 cases of general peritonitis, due to perforative or gangrenous appendicitis. The series included 4 children of 15 years or under. There were two deaths, both being amongst the appendix cases. One child of 11 died of pneumonia



on the fourth day, the post-mortem showing a clean peritoneum, although the symptoms had dated from 4 days before the operation. In one case the patient was 4½ months pregnant, but recovered without aborting. One man died on the 10th day after a small secondary abscess had been opened. In the pregnant case no suprapubic tube could be used to drain the pelvis. Mr. Jeans mentioned a sign which had been present in two of the cases, and which he called "the abdomen moving the wrong way," and attached some importance to it as an early sign of general peritonitis. All the cases were treated with slight modifications of the Murphy method, and Mr. Jeans suggested that possibly the continuous administration of salines might act as a vaccine in appendicitic cases by the absorption of solutions of the products of the *B. coli*, but he left this to the vaccinators and the immunisators.

Mr. PAUL mentioned 15 cases under his care during the last year, of which 4 had died, 2 from perforated duodenal ulcer. In duodenal cases he recommends closure of the pylorus and gastro-enterostomy if the patient can stand it, as he considers death to arise from secondary leakage. He does not interfere unduly with the peritoneum unless very foul, and he washes it through a double tube. He does not use lumbar drainage, but relies upon a long, finely perforated silver tube in the pelvis, and packs down to the perforation. He strongly advocates the continuous instillation of saline under the skin by Barnard's method, the Fowler position, and he thought purgatives desirable.

#### GLASGOW EASTERN MEDICAL SOCIETY.

MEETING HELD OCTOBER 20TH, 1909.

The President, DR. PETER BUCHANAN, in the Chair.

DR. JOHN PATRICK read notes of a case of CONGENITAL HYGROMA OF THE NECK in which he had operated when the child was 13 days old. The tumour was of considerable size, and bulged prominently below the jaw, extending somewhat towards the left ear. It was somewhat doughy on pressure, and there was a globular swelling like a small orange embedded in the neck. Dr. Patrick incised the swelling, which was found to be multilocular, and a quantity of semi-gelatinous fluid escaped. The globular swelling seemed to be a cystic growth springing from the hyoid bone. This was cut away as far as possible. The wound was packed with gauze, and allowed to granulate from the bottom. The reason for early operation was that the tumour was rapidly growing, and causing pressure symptoms on the trachea.

Dr. PATRICK also read notes and produced the P.M. specimen of a case of

#### HERNIA OF THE STOMACH

produced in a female by the handle of a hay fork entering the rectum and finally passing through the diaphragm. The patient entered the infirmary suffering from acute peritonitis with an indefinite history of the accident, and laparotomy was performed within one hour of admission. Death unfortunately occurred within 24 hours of operation.

Dr. PATRICK also read notes of a case of "Hæmorrhage into the Cerebellum" of a man who, previous to death, suffered from headaches and vomiting succeeded by coma. It was thought that this condition was brought about by the shock that the man received from a car accident some short time previous to the symptoms.

Mr. WM. TAYLOR, jun., L.D.S., showed an ingenious device for treating fracture of the lower jaw by an inter-dental splint, and a special clamp being used to fix the displaced fragments.

Dr. JAMES DUNLOP read notes on a case of "Pneumothorax" in a patient who was suffering from early pulmonary phthisis and diabetes mellitus, on whom he subsequently performed paracentesis. There were the usual physical signs of the pneumothorax present, namely, hyper-resonance collapsed lung, displaced heart, bell sound, pulse small and rapid, sugar

in the urine. Dr. Dunlop used a trocar and cannula, and the contained air came out hissing as if under pressure. The patient afterwards stated that his cough was diminished, and also the spit, and instead of remaining in bed as advised he continued to get up every day, and suffered no ill-effects in consequence. The pneumothorax returned, and there was afterwards some suspicions of fluid in the pleural cavity.

#### CENTRAL MIDWIVES BOARD.

MEETING HELD OCTOBER 28TH, 1909.

The President, DR. CHAMPNEYS, in the Chair.

At the special meeting which was announced as preceding the regular proceedings, and the object of which was to consider what action should be taken as to the recommendations of the Midwives Act Committee, Dr. Stanley Atkinson, representing the Midwives' Institute, moved the following resolution:—

#### AMENDMENT TO MIDWIVES ACT.

That any amendment of the Midwives Act, 1902, in the light of the recent report, must provide for:

1. (a) Adequate and certain remuneration of medical practitioners called in, under the Board's regulations, to assist midwives; (b) such payments to be made by the Local Supervising Authority, and not by the Poor-law Guardians. (b.)
2. More definite powers of "suspension" of midwives, whether by the Local Supervising Authority or by the Central Midwives Board. (d4.)
3. Subvention from public funds of midwives who are unable to maintain themselves in sparsely populated and poor districts. (d4.)
4. Revision of the constitution of the Central Midwives Board so as to afford two representatives, to be chosen without restrictions, of the Midwives Institute. (dr.)
5. Systematic purging of the Midwives Roll, in accordance with D3 of the report. (d3.)
6. That the right of delegation of their powers under the Act by the Local Supervising authorities should be revoked. (c.)

The first part of No. 1 was carried unanimously, but the majority voted against the second part, the general feeling being that (a) as the Poor-law already possessed the machinery for paying for medical assistance to midwives, and were able to recover payments on loan, the matter would be settled more speedily if left in their hands. On the other hand, Mr. Atkinson maintained that it was encouraging pauperism, and objected to the stigma of it being laid on families which were only suffering from an unforeseen emergency. The remaining clauses of the resolution were carried.

Miss Paget, representing the Q.V.I.Inst., stated that the Committee of the Institute, in view of the enormous increase of work which would be thrown on them by the recommendation of the Select Committee with regard to the supply and distribution of midwives, urged their claim for a second representative on the Board. A resolution was passed recommending this claim in the event of the Committee's recommendation being carried into effect.

Reporting on the financial position, the Secretary stated that the Board held a balance of £1,282. Some of the Local Supervising Authorities, especially in Wales, had made no response to the demands for fees due; and a resolution was carried to the effect that should a final application fail to elicit any reply, the Board would be forced to take legal action.

A letter had been received from the Lord Mayor of Manchester, forwarding a copy of a resolution passed by the Manchester City Council, suggesting that the Municipal Corporations Association should be represented on the Central Midwives Board.

A letter was read from Dr. G. A. Clarkson, of Caterham, complaining of the conduct of a certified midwife.

It was agreed that Dr. Clarkson be informed that as the midwife was acting at the time of complaint as

a nurse and not as a midwife, the matter is not within the scope of the Board's jurisdiction.

The question of establishing an examination centre at Cardiff is under consideration.

The next general meeting will be held on November 25th; and a Penal Board will take place on December 1st and 2nd, to consider the charges against 30 women cited to appear before them.

## CORRESPONDENCE.

### FROM OUR SPECIAL CORRESPONDENTS ABROAD. FRANCE.

Paris, Oct. 31st, 1909.

#### PLEURISY.

THE treatment of sero-fibrinous pleurisy by hypodermic injections of the pleural liquid has recently come to the front once more, both in France and abroad. This method was first practised by Gilbert, of Geneva, and is known under his name.

Since that time (1894), the method was taken up by different authors. It is thus that Scarpa two years later published an article on auto-serotherapy in pleurisy of tuberculous origin.

In 1889, Prof. Debove, bearing in mind the experiments he had made when injecting under the skin the liquid of ascites, he observed with a rise of temperature phenomena of general reaction, supposing products analogous, if not identical, to tuberculin in the peritoneal effusion had utilised the pleural liquid which he considered might also contain tuberculin.

With a syringe containing 5 cubic centimetres, he withdrew that amount of liquid from the pleura, and immediately injected it beneath the subcutaneous pericostal tissue.

Under the influence of this simple treatment, the patients got rapidly well without the aid of any drug.

However, at the Medical Congress of 1900, Mongour and Gentes made certain reserves as to the results of this method.

Since then several cases were published by Maragliano, Donzello, Fedi, Baccani, Nasetti and others, and more recently Schmitzen, Enriquez, and Gaultier. From the observations of these latter, the decrease of the effusion commenced immediately after the first injection, while the improvement and relief experienced by the patient were never interrupted.

Sometimes the liquid was completely absorbed in from 6 to 10 days; at other times a longer period was required. As to thermic reaction, it was *nil* in many cases, while in others a rise of one or two degrees was observed, but one constant effect of the subcutaneous injections of pleural liquid was an abundant diuresis.

As to the mechanism by which this auto-serotherapy acts in such a beneficial manner, no plausible explanation has been found. In any case the conclusions arrived at by Fedé deserve reproduction: auto-serotherapy seems to be a good treatment of pleurisy.

(a) The method can be easily employed and is absolutely inoffensive.

(b) It can be used not only in the treatment of tuberculous pleurisy, but in other varieties.

(c) It seems to be more rapid in the acute than in the chronic form.

(d) The quantity of liquid to be injected is from two to three centimetre cubes in acute pleurisy, and 5 c.c. in the chronic form.

(e) Thermic reaction is observed more especially in tuberculous pleurisy, affording thus an element of diagnosis. Injection of the pleural liquid produces abundant diuresis.

#### SUPRARENAL INSUFFICIENCY.

Under the influence of lesions of the suprarenal capsules two kinds of symptoms may be observed, said M. Emile Sergent, physician at one of the Paris hospitals: the first, result from irritation of the pericapsular nerve plexus, irradiating lumbar pains on the one hand and general pigmentation of the skin and of the mucous membranes characterising Addison's disease on the other. The other signs of suprarenal

insufficiency consist in troubles of the circulation, of the digestive organs, toxic manifestations and general malaise.

The pulse is small and unstable, varying from one day to another according to circumstances, while arterial hypertension is always observed. These symptoms are accompanied by phenomenon described by M. Sergent as the white streak, to which the author attaches primary importance in the diagnosis of suprarenal insufficiency. He considers it the reverse of the red streak in meningitis. To determine its appearance, the skin of the abdomen is slightly rubbed with the finger, and after a few moments a large white streak appears, remains stationary for three or four minutes, and finally fades away.

Arterial hypertension is accompanied with tachycardia and a sensation of cold and sometimes with a tendency to collapse.

As regards the gastric organ, anorexia is almost complete, with frequent vomiting.

Asthenia is the predominant symptom of suprarenal insufficiency. Dreading the slightest exertion, deprived of all moral and physical activity, the patient is completely prostrated. In a perpetual semi-somnolent condition, he answers questions addressed to him but feebly, receives food with ill grace from dread of the exertion.

During the development of the malady the syndrome may be slow or acute. The former is the clinical expression of the progressive decrease in the function of the suprarenal capsules characterised by melanoderma or colouration of the skin varying from a few brownish spots to a general bronze aspect with the above train of symptoms.

Acute syndrome is provoked by a sudden decrease of the renal capsules, and the symptoms are but an exaggeration of those belonging to the progressive form. They may appear suddenly in patients who had been enjoying good health up to that moment, and frequently mislead the attendant.

The outset is marked by severe lumbar and abdominal pains, cramps, incoercible vomitings, and frequently diarrhoea; the skin is soon covered with clammy sweat, the extremities are cold, the pulse grows weaker, the white streak appears, and the patient falls into collapse or coma.

The treatment reposes essentially on serotherapy, either by the fresh suprarenal glands, or by dry extract. The former may be given in doses of 30 to 40 grains once a day, gradually increased to 100 grains or more, and the latter in six grain doses three times a day, or twenty or thirty drops of adrenalin divided into five or six doses in the 24 hours.

## GERMANY.

Berlin, Oct. 31st, 1909.

At the Naturforscherversammlung, Stabsarzt, Dr. Kuhn, Berlin, spoke on

#### THE STIMULATION OF BLOOD FORMATION.

In all normal as well as abnormal conditions, he said, in which the organism suffers from a certain deficiency of oxygen, there is a compensatory provision for making more and better use of the oxygen of the atmosphere, leading to an increase of the elements of the blood. The drug that increases the blood (arsenic) does not act directly on the blood forming organs, but first of all destroys a portion of the blood. By diminishing the amount of blood an acute demand for oxygen is made, and by it a new blood formation is excited. It is in this way that tuberculin acts. The simplest way of stimulating the formation or building up of blood is therefore the establishment of a sharp demand for oxygen, as by living in a high mountainous region or the wearing of a suction mask.

Hr. G. Levy made an interesting communication to the meeting, the correctness of which, if generally confirmed, will be hailed with great satisfaction, to the effect that amongst the last 1,000 children vaccinated by himself 41 per cent. were breast fed. If so education has begun to bring forth fruit, as it is evidence that the labouring class in Berlin are returning to the natural way of feeding infants. He

closes his observations with the remark that "the infants that were fed naturally were much stronger than the others."

#### THE PRACTICAL YEAR.

The *D. Med. Wochenschr.*, 37/09, contains a proposal for a reform as regards the way in which the last or practical year of the medical curriculum shall be passed. The proposed reforms fall into seven heads, some of which are of sufficient interest to bear transplanting, or at least some consideration.

The first proposal is that the first six months of the practical year shall be passed in a large hospital or University Institution, whilst the last six months the "Praktikant" may be allowed to attend smaller institutions.

2. In the larger institutions the studies of the Praktikanten must be conducted under the supervision of a Praktikanten dozent appointed by government.

3. Every Praktikant must be engaged in practical surgical work for two months.

4. Every medical student, either during his student-ship or during his practical year, must practise midwifery exclusively for one month.

5. The Praktikant must be instructed in nursing duties.

6. Every Praktikant must attend a lecture on social medicine.

The 7th only refers to proof of vaccination.

#### TAR CARCINOMA.

The *Dermat. Ztsch.*, XVI. 2, contains an account of three cases of the above-named forms of cancer by Dr. L. Zweig, of Dortmund. The three patients were all labourers in a coal "briquette" factory. In one case the disease only progressed so far as the repeated return of wart-like growths on the face. After complete destruction by the galvano-cautery these did not return. The second patient did not come under treatment until a coarsely nodular carcinoma had developed in the scrotum. This was extirpated apparently with a permanently good result. The third case on the other hand was characterised by a rather rapid downward course. The patient was a man, æt. 29. He had already had numerous wart-like growths resulting from inflammations of the skin, which had been removed. There were multiple growths on both upper eyelids, the right cheek, the angle of the left lower jaw, and on the scrotum. When first seen they were still movable over the underlying tissues, but microscopically they were undoubtedly carcinomatous. Extirpation of the growths led to apparent permanent recovery; three years after, however, he appeared again with great swelling and painfulness of the right cheek. An incision was made that led to a fistulous passage, which led up to a grumous mass that filled the antrum of Highmore. The loss of substance became greater and greater, and the borders of the disease took on a more cancerous appearance. It did not appear possible to remove all the diseased parts, Röntgen ray treatment did no good, and the man at last died after almost the whole of the right side of his face had been destroyed. The case was one of secondary or metastatic disease of the antrum of Highmore. There had been no return at the spot where the first disease was removed, nor were there any internal metastases. The disease has happily become much more rare than it was formerly. Rigid cleanliness is of vast importance, but where the disease has once shown itself that, in itself, is an evidence of a tendency and of danger if the particular employment is still followed. Why the poor man was not made to make change in his employment when it was so plainly dangerous the writer does not state, although the remarks are concluded by the observation that when once warty growths have become manifest the patient was to be strongly advised to change his employment.

#### AUSTRIA.

Vienna, Oct. 31st, 1909.

#### THE SPECIFIC ANAPHYLACTIC REACTION IN THE BLOOD.

RANZI, in the Serotherapeutic Institute, has been working for some time on this subject, since Pfeiffer and Finsterer announced to the medical world that serum from carcinomatous tumours had a specific

anaphylactic reaction—that is, a particular shock, accompanied with dyspnoea, coma, cramp and paralysis. The method of treatment in their experiments was founded on an intraperitoneal injection in a guinea-pig with carcinomatous serum, and followed in 48 hours by an intraperitoneal injection of the pressed juice from a malignant tumour taken from a cancerous patient, which they affirm gave all the symptoms of anaphylaxia, but the principal of these, they affirm, is the fall of temperature. Their proof rested on experiments with similar animals and serum taken from non-malignant growths, with re-injections where the temperature of the animals did not vary. These authors concluded that carcinomatous serum was a specific for carcinoma where it produces this anaphylactic reaction. Yama Nouchi, and more recently Bauer, confirmed these experiments with tubercular serum. Ranzi endeavoured shortly after the announcement to obtain similar results in the laboratory by acting on animals with the various juices of the human organs and tumours, but failed to obtain that specific anaphylaxia in even guinea-pigs or rabbits. After trying the serum of patients suffering from carcinoma, he made use of an aqueous extract of the tumour, and re-injected after 24 hours, but still the animal gave no specific phenomena. Ranzi therefore concluded that no specific anaphylactic was present, but Pfeiffer and Finsterer maintained that his experiments were faulty. He again publishes a voluminous paper, with experiments of every description, to confirm his objection to the specific anaphylactic. The objections to his first experiments were that he had re-injected within 24 hours, while Pfeiffer's was after 48 hours; secondly, they had used expressed juice, while Ranzi had worked with an aqueous extract of the tumour; and, lastly, that he had not observed the temperature curve after the re-injection. Pfeiffer and Finsterer's chief observation being confined to the rectal temperature after the re-injection of the animal, it was the aim of Ranzi to follow the same experiments closely by intraperitoneal re-injections, as well as intravenous injections, and marking the fall of temperature in the different animals. He selected young guinea-pigs, varying in weight from 200-300 grammes, warming the serum, and injecting it intraperitoneally, and re-injecting some intraperitoneal and some venous. He noted the temperature of the animals, both control and experimental, before commencing, and found the average temperature ranged between 38° and 39° C. For control animals he used solutions of different substances, such as common salt, bouillon, etc., which had different values according to quantity; for instance, 4 c.c.m. of NaCl injected intraperitoneally lowered the temperature 0.7° C., while 10 c.c.m. of the same substance reduced it to 2.2° C.; 4 c.c. of fluid from a hydrocele reduced the temperature 0.6° C.; the same quantity of bouillon reduced it 1.5° C.; 2 c.c. of serum from a horse reduced it 0.7° C., while 3 c.c. of serum from a pig reduced it 4.4° C., and 1½ c.c. of human serum reduced it variously from 0.6° to 4.0° C. Coming to the carcinomatous portion, the fluid from a carcinomatous ascites 4 c.c. reduced the temperature 0.4° C.; expressed sarcoma of the mammae 4 c.c. reduced it 2.7° C.; while the same amount expressed from a sarcoma of the pelvis reduced the temperature 1.8° C. Coming to the re-injection, he divides it into homologous and heterologous; the former is the re-injection after 14 days of a similar fluid, while the latter is the re-injection of a different fluid—i.e., from another animal. He found that 1 c.c. of the serum of the horse injected subcutaneously and followed in 14 days with 1 c.c. injected intravenously, reduced the temperature 0.5° C. to 1.3° C., and after a few minutes acute phenomena and death followed. Again, 1 c.c. of the serum of the horse injected subcutaneously, and followed in 14 days with other 3 c.c. of the same serum injected intraperitoneally, the temperature fell 5.9° C. within two hours, with severe phenomena, but recovery; 1 c.c. of human serum injected subcutaneously was followed in 14 days with 1 c.c. of the same serum injected intraperitoneally with a fall of temperature of 6° C. within one hour, extreme symptoms, and death. In the heterologous,

1 c.c. of equine serum injected subcutaneously and followed in 14 days with a re-injection of human serum intraperitoneally, reduced the temperature  $3.9^{\circ}$  C. within 24 hours, and no peculiar phenomena were present. If 1 c.c. of human serum be subcutaneously injected, and followed after 14 days with a re-injection of 3 c.c. of the serum of a pig intraperitoneally, the temperature will fall  $3.2^{\circ}$  C. in 14 hours, and no special phenomena will be observed. He therefore concludes that the fall of temperature is no specific for the anaphylactic shock.

### HUNGARY.

Budapest, Oct. 31st, 1909.

#### NEW NOMENCLATURE IN OBSTETRICS.

In the address of Prof. Wm. Tauffer, at the Sixteenth International Congress, he remarked that in the gynaecological section of the previous international congress at Lisbon this subject was brought forward for further consideration and investigation, namely, the proposition of Alfredo da Costa, that the Congress should consider working out the unity of nomenclature in obstetrics and the most generally used procedures in obstetrical work. Our Executive Committee busied themselves about the question, and the path and means of the possible solution have been thoroughly weighed. It was, however, perceived that to carry out the problem of this acknowledged ponderous affair, no member of the Executive Committee would be competent, because the unity of the nomenclature could not be worked out either to order or as a commission. The foundation work of this subject could be achieved only by such a scientist, who is just as capable a gynaecologist as he is a qualified philologist, one who is willing to take the work voluntarily, and who has besides the polyhedrous knowledge, and has the necessary time also at his disposal; he has not only to work out the nomenclature, but also to establish the same. Nevertheless, he was convinced that it is incumbent upon the International Congress to recur to such far-reaching and universally important questions repeatedly, in order to keep the matter upon the surface, even when there is no immediate prospect, as on the present occasion, of going into the matter with a view to its solution. We can, however, hope that the right man among the indefatigable workers of our section will be found, sooner or later, who will take the matter up in the proper spirit, and will lay the same as a finished work before the scientific world. That such an able man of the future can reckon on the estimation and the thanks of every member who loves our science, is self-evident.

#### THE VALUE OF CONGRESS WORK.

The usual form of preparation of the scientific contents of the International Congress is to select proper scientific topics and to place them before the Congress in form fit for discussion. To acquit itself of this task the Executive Committee sent out inquiries to the most celebrated specialists among all nations, and requested opinions as to what topics were at present most proper for discussion. From the answers received by the Executive Committee, the topics for discussion were constructed after thorough consideration. The essayists considered it practical not to distribute the subjects among themselves, but to treat the programme in unity. On the contrary, another group of essayists was of the opinion that it would lead better to the goal when each essayist, independently of any other, should select and work out his own essay. They were of opinion that in this way the differential conception and the conclusion arrived at, and the manner of the scientific discussions, would come better to the surface.

In the history of medicine we find many examples for illustration where the weight of certain acknowledged authority held captive the direction of the research, and often for a longer period influenced the same, not seldom for the hindrance of science and suffering mankind. "As an example, I could mention in Germany the fatal mistakes of Dieffenbach (*Oper Chirurgie*, Leipzig, 1848, p. 805) and Scanzoni (*Handbuch*, third edition, 1863, p. 474), which in the 50-60th year of the last century combated the justifi-

cation of ovariectomy; or the wrong position taken by Malgaigne, Velpeau, Trousseau, and Moreau in the same question in 1856-7, when, in the discussions of the Academy of Medicine in Paris, they threw overboard ovariectomy; but in inflammation of the ovaries the iodine injection, with or without drainage, was recommended as exceedingly effective; and covered these dreadful mistakes with considerable statistics. And, lastly, where can we find a better proof for the imprisonment of the spirits of the past of the seemingly unprejudiced world of explorers, than in the history of Semmelweiss; the value and victory of whose doctrine, through the unutterable mistakes of Virchow, were for a score of years delayed?

Now, the question is this: if we had had at that time international congresses, the important questions about ovariectomies, and those about the ætiology of puerperal fevers, could have been brought in about 1860 for discussion; and perhaps the truths of his doctrine would have come to its right twenty years sooner. What an immense number of lost lives lie in this omission.

These and many other examples prove that it will be of great benefit to meet from time to time on the international ground of science. By coming in direct contact with the individual scientists we learn to know the direction of their research and the results obtained. In this way we have the opportunity to compare; the discussions awaken new thoughts in us, they give a severe test in the direction of our own thoughts, and teach us not only to know our good points, but our faults also; thus we free ourselves from the dangerous captivity of a one-sided comprehension.

From this standpoint we hope to receive many benefits from the discussion of the essays.

#### "RECOLLECTION OF SEMMELWEISS.

"Gentlemen,—The milieu in which I have the honour to greet you is—if I may be permitted to say so—that of the spiritual inheritor of my sublime predecessor *ex cathedra*, Philip Semmelweiss, the glorious son of our country, and this city. The ætiology and prophylaxis of puerperal fevers is to-day the common property of the whole civilised world: his discovery is the foundation work for research for all times.

"The Committee of the Semmelweiss monument has erected, from the contributions of physicians the world over, the monument in Elisabeth Square, in this city; and takes this opportunity to render herewith account, and by presenting this souvenir, which each one of you will find in his mail, we discharge our duty.

"On the pedestal besides Semmelweiss is a place still empty, yet it is reserved for the man whose brain will be illuminated with the same Godly spark which enlightened once the mind of Semmelweiss; it is for the man who will discover the therapeutics of puerperal sepsis. Under this device our Congress begins. May the Almighty God bless our work and bring us nearer to our sublime goal."

## FROM OUR SPECIAL CORRESPONDENTS AT HOME.

### EDINBURGH.

PARLIAMENTARY REPRESENTATION OF EDINBURGH AND ST. ANDREW'S UNIVERSITIES.—Sir John Batty Tuke having announced that he does not desire to come forward again as a candidate, Sir Robert Finlay, K.C., has been invited by the Conservative Association to contest the seat at the forthcoming general election, and has agreed to place his services at the disposal of the constituency. Before entering upon the study of law, Sir Robert entered the medical profession, and although he has never practiced, he holds a medical degree. He is a brother of the late Dr. William Finlay, Trinity, whose death took place only a few months ago. Although of late years the member for the Universities has been a practising medical man, the adoption of Sir Robert Finlay is only a return to the state of matters which existed before Sir William Priestley's day, when the seat was regularly held by lawyers, such as Lord Pearson, Lord Kingsburgh, and Lord Stormonth Darling.

**THE LATE DR. CHARLES REID.**—Although for many years Dr. Reid had not been resident in Scotland, the news of his death at the early age of forty-five will be received with wide-spread regret. Dr. Reid was a great footballer in his day—perhaps the finest Rugby forward Scotland ever produced. Even as a schoolboy "Charlie" Reid was selected in 1881 to play for Scotland, and up to the end of 1888 he never missed an international match. On several occasions he captained the Scottish side, and he was for many years captain of the Academicals, who, in the palmy day of his leadership contributed no fewer than five of the nine forwards of the 1886-7 team to the international team. After qualifying, Dr. Reid practised at Selkirk, and subsequently in Swindon, Wiltshire. He had a magnificent physique, standing well over 6 feet in height, and was an excellent shot, a keen fisherman, and a noted breeder of Scotch terriers.

**FIFE COLLIERIES' MEDICAL OFFICERS.**—The following settlement has been arrived at in the dispute as to the question of medical attendance on miners in the Kelty district:—1. Each man employed at the Fife Company's collieries to nominate each quarter the doctor whose services he desires for the next quarter, a list of the names to be sent to the doctor who has been nominated. 2. Each doctor to receive the contributions of the men who nominate. 3. In accident cases requiring immediate attention, the first doctor called must attend until the man's own doctor is available, when the case shall be handed over to him. 4. The question of the supply of medicines to be further discussed after consultation with the man and the Fife Medical Association.

**MEDICAL CURRICULUM AT EDINBURGH UNIVERSITY.**—At the statutory meeting of the General Council of the University, on October 29th, a motion was carried unanimously remitting to the Business Committee to report as to the desirability of procuring by an amending Ordinance, or otherwise, further improvements in the medical curriculum and examinations. In speaking to the motion, Dr. Norman Walker referred the Council to the report approved by the Pathological Club, whose former report and suggestions, the Business Committee stated, were of much assistance toward the framing of the recent ordinance. The report in question is the outcome of a year's hard work by an *ad hoc* Committee of the Pathological Club, which took evidence from the various teachers and others interested, and submitted to a general meeting of the Club a draft report, which was exhaustively discussed on several different evenings. This report has been published in *extenso* in the *Edinburgh Medical Journal*, and as it wisely condescends upon particulars as well as lays down general principles, it is inexpedient to summarise it further than to say that it suggests that a fixed curriculum should be insisted on, and the taking of classes in an unusual order should be discouraged; that the curriculum should be lengthened to the extent of making the student begin in summer instead of in winter, which would add one session of three months; and that in the teaching of the preliminary and scientific subjects of the course the bearing of these on medical practice should be more carefully kept in view than at present. Dr. Harvey Littlejohn, Dean of the Faculty of Medicine, speaking at the meeting of the General Council, said that they had the question of the curriculum under consideration in the Faculty, and that they would welcome any suggestions of the Business Committee.

### GLASGOW.

**GLASGOW FEVER HOSPITALS.**—On account of the prevalence of scarlet fever and diphtheria in Glasgow, a temporary pavilion is being erected at Ruchill, and will be ready for occupation in the course of a few days. The Health Committee also contemplate erecting an observation block of 48 beds at Ruchill, in order to guard against the danger of cross infection.

**QUACKERY RAMPANT.**—The public of Glasgow have been thrown into a state of hysterical excitement over the marvellous cures reported to have been achieved by one bearing the name of Dr. Macaura. One of the largest halls in the City of Glasgow has been taxed to

the utmost to accommodate the people anxious to see and hear Dr. Macaura and his wonderful cures. It is claimed that cases of deafness, old-standing rheumatism and inveterate paralysis have yielded like magic in the hands of this marvellous individual. One patient is reported to have hobbled on to the stage in great agony, and, in his own words, he was so stiff from rheumatism that he could not rise from a chair. It was a surprise for the vast audience to see this patient, after getting about ten minutes' treatment, rise from his chair and move his limbs freely! We are informed that this wonder worker explained to the audience that after all it was a simple matter. He said, "Picture to yourselves a little spring hammer striking on the stiffened joints of muscles with a force equal to a half horse-power." His contention is that his vibratory treatment circulates the blood previously stagnant. Other cases of apparently a crippling nature yielded to his vibratory machine. We are not acquainted with Dr. Macaura's credentials, and, needless to add, we cannot find his name on *The Medical Register*, but evidently he has gained a power over patients that no diploma can confer on an ordinary practitioner.

### BELFAST.

**ALCOHOL IN WORKHOUSES.**—The varying views as to the use of alcohol in workhouse infirmaries have been amusingly illustrated during the past week in two Ulster workhouses. In Lisnaskea, Co. Fermanagh, it was reported that an inmate had drunk ten glasses of champagne, three of Wincarnis wine, and two of brandy in one day, as well as taking two eggs and three pints of milk! One of the guardians inquired upon what day the funeral was held. As opposed to these somewhat generous ideas as to the use of alcohol, we find that at Lurgan Union, the police having sent for the use of the inmates fourteen dozen of porter which had been seized in a shebeen, the same was given to the pigs. Upon what day the funeral obsequies of the pigs were celebrated history does not relate.

**THE PASSING OF THE ROYAL UNIVERSITY.**—Before these lines are in print, the Royal University will have ceased to exist, and it departs unwept, unhonoured, and unsung. It was begotten in deceit and jealousy, and existed most of its days in an atmosphere of bickering and petty intrigue, but it departs in a storm of laughter. The action of the Senate in conferring honorary degrees on themselves all round relieves the situation of all traces of tragedy, and converts it into pure farce. Meantime, the Queen's University of Belfast is growing stronger every day. The classes are filling rapidly, there is keen competition for the scholarships offered, there is wide and increasing interest in its affairs among the citizens generally, and there is every reason to believe that before long we shall have a prosperous, popular, and thoroughly successful University.

## LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

### THE GARDEN CITY MOVEMENT.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—As a lay reader of your valuable paper, I notice that, in common with the noble profession you so well represent, you never forget the maxim, *Salus Populi*, which heads your pages, and I trust that, in continuing to take your share in promotion of social progress in every direction, you will not fail on occasion to give your support to the Garden City movement, which promises to achieve so much towards the physical and moral health of our people. This movement aims at making citizens as well as making cities. This aim has been largely neglected during the past century during the enormous development of our industries, and the crowding together of our millions of increase of population in the hideous workmen's

quarters and slums of our great towns. The people are to a great extent moulded by their environment, and there can be no doubt that not only the stunted frames, but the narrow intellects and the incapacity to appreciate anything beautiful in Nature, art, or literature, which characterise great sections of our populace, are in great measure due to the squalor of the surroundings in which they have been bred. The town planning movement so far has shown what can be done by voluntary co-operation, and through it the question has been placed well within the region of practical politics, as witness the Bill now passing its final stages in Parliament. As the movement advances it cannot fail to associate the poorer classes actively in the improvement of their own condition, and to teach them to understand the real meaning of citizenship. It has been sufficiently proved that all new town areas can be developed in every sense of the words most profitably on Garden City lines—profitably to landowners, profitably to local authorities, and profitably to the individual citizen. The movement must be pressed forward until these facts are fully recognised on all hands, and you, Sir, will, I am sure, give us all the help in your power. I enclose my card, and remain,

Yours truly,

CIVIS.

October 29th, 1909.

# VIAVI REMEDIES.

To the Editor of THE MEDICAL PRESS AND CIRCULAR

SIR,—As a medical profession we should all be grateful to Dr. David Walsh for his recent papers on "Quacks, False Remedies, and the Public Health." To my mind it constitutes one of the strongest and ablest attempts yet made to concentrate attention upon what is, after all, the crucial point of the whole matter—that is to say, upon methods of controlling or checking the evil. I trust the General Medical Council will duly appreciate the mass of facts and suggestions brought together by Dr. Walsh, especially that which insists upon the wisdom of using to the utmost existing legislation. As regards the passing mention of the Viavi methods, and their scathing exposure in the land of their origin—namely, in the American Medical Association's book, "Propaganda for Reform in Proprietary Medicines," it would be well were that volume in the hands of all your readers. On page 233 of the fifth edition it says of Viavi:—"The 'treatment' consisted, and in great part still consists, of prescribing vaginal douches." The article quotes Viavi literature advancing such claims as the limiting of offspring, the curing of a very large proportion of women's diseases, the cure of uterine tumours and of many nervous affections, and the regeneration of wasted testicles.

Now, Sir, it may be of interest to state that the Viavi remedies, to which the above-mentioned scathing exposure relates, are advertised in the public trams of one of our most famous health resorts on the South Coast of England—namely, the conjoined towns of Hastings and St. Leonards. The advertisement announces "free lectures" at an address in the town, and is permanently cut in white letters on a ruby glass ground. Such an advertisement can only serve to disgust medical men who visit the town, as the writer did a few weeks ago, to find the local Council is taking money—in other words, sharing the profits of a method the nature of which has been unfavourably commented upon for years past. Would it not be well for the local authorities of a town that depends mainly for its success as a health resort to submit advertisements of this kind to the medical societies of their district for an opinion? Would it be asking too much for the Councils to obtain copies of the British Medical Association's "Secret Remedies," and of the above-mentioned American book, to be kept for future reference in the matter of advertisements of "cures" or remedies.

I am, Sir, yours truly,

A GENERAL PRACTITIONER.

Oldham, October 30th, 1909.

## REVIEWS OF BOOKS.

### SEMMELEWEIS—A CHAPTER IN THE HISTORY OF MEDICINE. (a)

It is difficult for one at the present day to realise the condition of our hospitals at the beginning of the last century. The bright, cheery wards, spotlessly clean, the thorough ventilation and absence of offensive smell, and the general appearance of comfort of the patients, would, we think, be a source of amazement to the physicians and surgeons of former days could they be brought back to our modern hospitals. One incident in hospital management which occurred in the year 1782 may be mentioned as an illustration of this change. It had been recommended by a committee of investigation as to the condition of the hospital "that no sand be used in any of the wards." The commentary of the medical officers on this recommendation is most suggestive. They said:—"This may be tried, and can be laid aside if not found to answer, but hitherto it was used to soak up the spits and accidental dirt occasioned by the patients." A hospital with the beds full of septic patients, attended by nurses who were generally illiterate, and not infrequently drunk, and the ward floors covered with sand "to soak up the spits and accidental dirt occasioned by the patients," suggests a state of things from which even the most hardened might turn with disgust. We cease to wonder that under such conditions the mortality rate was high; we rather wonder how any inmate escaped with his life. The opening of the nineteenth century saw a marked improvement in the condition of the hospitals of Great Britain and Ireland, due no doubt in a great measure to the preaching of Howard; but on the Continent things improved more slowly, for we are told that when, in 1851, Arnet visited the lying-in hospitals of London, "what appeared to impress him most was this cleanliness and the absence of offensive odour in the wards." From statements such as this we may gather some idea of the condition of the great Vienna Lying-in Hospital in 1846, when Semmelweis entered on the duties of Assistant in the First Obstetric Clinic. At that time the medical classes of Vienna were thronged with students of all nations, who came to learn from such teachers as Rokitsky, Hebra and Skoda, and these students passed from one clinic to another, anxious only to see and learn as much as possible. Thus we are told that men rushed from the post-mortem room, where they had been examining morbid specimens, to the lying-in wards, where they were freely permitted to examine the patients. Ordinary cleanliness, much less disinfection, was rarely thought of. The natural result followed, and of the 20,042 women confined at the First Obstetric Clinic in the six years from 1841 to 1846, 1,989, or 9.9 per cent., died of puerperal fever. In one year, 1842, the mortality rate reached 15.8 per cent. We say now such a mortality was natural under the circumstances, and at the time it was looked on, if not as natural, at least as quite unpreventable. Numerous hypotheses were current as to the causation of this disease, and though they differed widely from each other, yet they had this in common—that they bore no fruit in the prevention of the disease.

It was under these conditions that Semmelweis set himself to solve the problem of puerperal fever, and the methods he adopted and the measure of success and failure which he attained are all set forth by Professor Sinclair in the book before us. Looked at from the beginning of the twentieth century, what a triumphant success, equalled perhaps once or twice in medical history, but never surpassed! Looked at from the point of view of the individual in 1865, with Semmelweis dead in a lunatic asylum, scorned and rejected of many, what a failure! To us, too, the sting of this failure is that it was caused by his own professional colleagues. When we feel inclined to boast of the great profession of medicine, let us think

(a) "Semmelweis, His Life and Doctrine: A Chapter in the History of Medicine." By Sir William J. Sinclair, M.A., M.D., Professor of Obstetrics and Gynaecology in the University of Manchester. 8vo. Pp. x. and 369. Portrait and illustrations. Manchester: The University Press. 1909.



on the career of Semmelweis, and remember that envy, malice, and all uncharitableness, as well as mental blindness, are not the exclusive property of those outside the profession. It is impossible to excuse and difficult even to explain the rejection by the profession of the Semmelweis doctrine of puerperal fever. The explanation which Professor Sinclair gives does not quite satisfy us. No doubt some of the opponents were actuated by malice, and Semmelweis himself did not push his doctrine with that force which his confidence in it would have justified; yet it was widely known and treated with indifference by many who had no cause for jealousy or malice against its author. We believe that the chief factor in the explanation of its rejection is that such doctrines are judged of by the profession by their results, and not by the logical arguments which support them. Even with our present advanced knowledge of bacteriology we know how difficult it is to always be sure of our asepsis, and in the absence of such knowledge we can understand how a few failures would weigh against much logic. It is only by the most minute and persistent attention to detail that consistently good results can be obtained in aseptic surgery, and it is only where faith is strong that such attention will be devoted to detail. Here our works may be justified by faith, but seldom our faith by works.

We must thank Professor Sinclair for the pleasure and instruction which his book has given us, and sincerely hope that this pleasure will be shared by many readers.

#### A SYSTEM OF OPERATIVE SURGERY. (a)

THE Editor says that the work will faithfully reflect the present position of British operative surgery. To ensure this he has secured the co-operation of several prominent British surgeons, who have undertaken to deal with their respective specialities. Promise is also held out "that the work will be up-to-date and useful alike to those who are about to operate for the first time, and those surgeons of experience who desire to keep themselves informed as to the progress that has been made in the various branches of operative surgery." Such a promise, coming from a teacher of Mr. Burghard's reputation, gives hope of seeing a system of operative surgery that would hold a high place in our medical literature. But all operative surgery is not British. There is ample evidence of this in the volume before us, as prominence is given to the classical operations of Dupuytren, Lisfranc, Chopart, Doyen, Esmarch, Farabœuf, Gussenbauer, Hey, Israel, Langenbeck, Le Fort, Texer, Lillenthal, Merzbecker, and numerous others, both on the Continent and the other side of the Atlantic. They have contributed equally to advance surgery and elaborate its operative technique, and so bring about successful results, accompanied with the present low mortality. Volume I. is made up of nine sections. The first is taken up by Lockwood, of Bartholomew's, on "The Principles and Technique of Wound Treatment," which we can confidently commend "to those who are about to operate for the first time." The second consists of two instructive chapters by Captain Houghton, R.A.M.C., on relatively new subjects, one on "Infiltration and Regional Analgesia," and the other on "Spinal Analgesia"; they are both eminently practical. Sections III. to VIII., embracing 501 pages, are from the pen of F. F. Burghard, whose large experience gives authority to his articles on "Amputations"—operations on arteries, veins, and lymphatics, operations on nerves, operations upon muscles, tendons, tendon sheaths, and bursæ, operations for non-tuberculous affections of joints. The operative technique in connection with the surgery of the head is well described, and made very practical; the chapter on the removal of the Gasserian ganglion is specially so, the methods of Rose, Hartley, Krause, Cushing, and Doyen being given their respective places. The illustrations are all that could be desired. T. P. Legg,

(a) "A System of Operative Surgery." By various authors. Edited by F. F. Burghard M.B.Lond., F.R.C.S.Eng., Teacher of Operative Surgery in King's College, London, Surgeon to King's College Hospital, Senior Surgeon to the Children's Hospital, Paddington Green. Four volumes. Vol. I. London: Henry Frowde and Hodder and Stoughton. Price 25 net. Per vol. 36s.

of the Royal Free Hospital, has written Section IX. Four chapters of this are devoted to plastic surgery, which subject has, however, been incompletely treated owing to the omission of certain important operations; these are probably reserved for the forthcoming volumes.

It is to be regretted that large medical works such as this, new editions of which are soon needed, are not published here, as in France, in cheaper form in paper covers.

#### THE MEDICAL INSPECTION OF SCHOOLS. (a)

AT a time when the medical inspection and treatment of school children is so constantly under discussion, Dr. Hogarth's manual should interest a considerable section of the public. It is written in a style which is suitable for the lay as well as the medical reader. No clearer exposition could well have been given of the absolute need for the medical inspection, and of its natural corollary, the medical treatment of school children by the State. We are glad to see that he recommends that the officers in connection with this branch of State medicine should be independent of and not subservient to the Medical Officer of Health, working hand-in-hand with the present Public Health officials, but forming in themselves a new body, whose duty it is to look after the health of the school child, not only from the point of view of those who are interested in Public Health, but also from the point of view of the educationalists. He points out that the school doctor should be well trained both in general medicine and also in the special departments, and should have also studied the normal and pathological growth and development of the child at a children's hospital. Another six months, he thinks, should be devoted to the study of fevers or of mental diseases. Concerning the vexed question of the medical treatment of those found in need of it, the author is no less explicit. After demonstrating in an incontrovertible manner the inability of either existing institutions or the general practitioners to supply what is required, he affirms that the only satisfactory solution to the question is to be found in the establishment of school clinics, at any rate in the larger towns and cities. Dr. Hogarth does not theorise without foundation. He has had considerable experience in school medical inspection in London, and is well acquainted with the needs of the school child. The reader who expects to find in this book the details of school hygiene such as the construction of school buildings or the proper slope of desks, will be disappointed, but in its place he will find well-thought-out if somewhat idealistic schemes concerning medical inspection and treatment of school children, and an outline of the present plans in vogue in the metropolis and elsewhere. In short, we regard this work as an important contribution to a great question, and would commend it to all those who are interested in the subject.

#### FOODS: THEIR COMPOSITION AND ANALYSIS. (b)

THIS well-known work has continued to grow, and it represents the result of many years' experience on the part of the authors. The book as a whole is excellent, but we should like to call attention to what we consider to be some of the deficiencies of the present edition. The authors adhere to the word "proteid" long after everyone else has come to use "protein," and we think that most bacteriologists now follow Chester in calling the organism formerly known as *B. enteritidis sporogenes*, *B. Welchii*. A paragraph on page 309, which is headed "Skim Milk Cheese," makes no reference whatever to this article. No mention is made of

(a) "Medical Inspection of Schools." By A. H. Hogarth, M.B., B.Ch.Oxon., D.P.H. Oxford University Press: Henry Frowde London: Hodder and Stoughton.

(b) "Foods: Their Composition and Analysis." A Manual for the Use of Analytical Chemists and others. By Alexander Wynter Blyth, M.R.C.S., Barrister-at-Law, Public Analyst for the County of Devon and the Borough of St. Marylebone; and Meredith Wynter Blyth, B.A.Cantab., B.Sc.Lond., F.I.C., Public Analyst for the Boroughs of Brighton and Eastbourne. Sixth Edition. Revised, enlarged and rewritten. Pp. 616 and xxv. London: Charles Griffin and Co., Ltd. 1909. Price 21s.

Richmond and Miller's or Cribb and Arnaud's processes for the estimation of boric acid in milk, while research connected with the question of the identity of human and bovine tubercle bacilli is left at the appointment of the Royal Commission in 1901. We have found no mention of the aldehyde figure of milk, or of Buddha's process for preservation. The authors differ from most bacteriologists in that they have not apparently adopted the procedure for the bacteriological examination of water, as recommended by the Committee of the Royal Institute of Public Health. If the procedure on page 561 for the preparation of agar plates be followed, the worker will wonder what on earth is meant. A very antiquated method for "standardising" nutrient broth is given (p. 561), in fact, we do not think we are doing the authors an injustice when we say that the section on the biological examination of water needs very careful revision. As it stands, it greatly detracts from the value of an otherwise most useful book.

#### ROYAL ARMY MEDICAL CORPS. (a)

SEEMING that the examinations for promotion in the ranks of the Royal Army Medical Corps are of a searching character, and likely to become more and more so, Captain Beggs' book appears opportunely, and will be of much assistance to the men of his corps. The very fact of the book having reached a second edition within three years shows its usefulness. Moreover, in this second edition, the contents have been brought well up to date in accordance with the latest regulations, official text-books, and Army orders which not infrequently amend, cancel, or add to something previously promulgated. The several parts of this well-got-up work deal with promotion to corporal, additional for promotion to sergeant, and further advancement to the grade of staff-sergeant. Besides, there are instructions of qualification for a certificate in semaphore signalling, now authorised as part of the instruction in field training of the Medical Corps, and, lastly, hints to young non-commissioned officers in clerical and other duties in a military hospital, which in themselves throw a responsibility of their own on the clerk section. The illustrations of surgical instruments and appliances have been well executed, and the chapter on the Regulations contained in the pay warrants, as also the instructions relating to pay duties and payment of the Corps are creditable. The questions and answers on various subjects embraced in the examinations for promotion are concise and comprehensive—in short, Captain Beggs' book shows care and labour in its compilation, and, while commending it, we wish it success.

#### GENERAL SURGERY. (b)

THE scope of "General Surgery," by Ehrich Lexer, requires some explanation. It is briefly and adequately described in the sub-title as "A presentation of the scientific principles upon which the practice of modern surgery is based." The work deals with the fundamental conceptions which apply to all fields of surgery, with the idea that when these are thoroughly mastered by the reader, their application to special surgical conditions will become easy and intelligent.

The volume is divided into seven parts. Part I. treats of wounds, aseptic technique, anaesthesia, and the principles of plastic operations. Parts II. and III. give an account of wound infection and necrosis; and Parts IV. and V. of injuries and diseases of tissues. Parts VI. and VII. are devoted to tumours and cysts. The appendices deal with the direct transfusion of blood, and the therapeutic inoculations of dead bacteria. The book contains 449 useful figures and pictures, a few of which are coloured. Most of them

(a) "Guide to Promotion for Non-Commissioned Officers and Men of the R.A.M.C." By Capt. S. T. Beggs, R.A.M.C., Reserve of Officers. London: Gale and Polden. 1909.

(b) "General Surgery." By Ehrich Lexer, M.D., Professor of Surgery, University of Königsberg. Translated from the German and edited by Arthur Dean Bevan, M.D., Professor of Surgery, Rush Medical College, Chicago, and Dean Lewis, M.D., Assistant Professor of Surgery, Rush Medical College. Pp. 1041. London: Sydney Appleton and Co. 1908.

are retained from the German edition. They suitably illustrate bacteriological and pathological slides, and the clinical and X-ray appearances of various conditions. There are also two coloured plates.

The volume is an up-to-date account of the science of surgery by a German author. The English translation contains such additions and alterations as seem desirable for completeness. Special chapters have been added on blastomycosis, on the blood examination in surgery, and on Wright's vaccine treatment.

"General Surgery" discusses many important and interesting points in the rationale of treatment, which are not usually given in such detail in most text-books. This feature alone would justify us in recommending it to the profession. The study of the work will be found both profitable and pleasant reading.

#### POISONING BY ARSENIURETTED HYDROGEN OR HYDROGEN ARSENIDE. (a)

THE subject of arsenic gas poisoning has received but scant attention from writers on toxicology. This is the more surprising when the extremely poisonous nature of the gas and the many trades and professions that must from time to time encounter it is considered. Although neglect of the subject is to be regretted, it is a matter for a kind of congratulation that such neglect has been noticed by the author. For this monograph deserves to be noted as an excellent specimen of thorough work. Two cases came within the experience of the writer, and he commenced a thoroughly conscientious examination of the literature of the subject, and studied the ways in which the gas was produced and detected, its effects, diagnosis, treatment and prevention. One hundred and twenty cases are so fully recorded that the account takes 104 pages. Most medical men who read this book will be surprised to find how great a variety of occupations are involved, and those interested in industrial diseases cannot afford to neglect this work. The book was badly needed, and the need has been admirably satisfied.

#### THE CURE OF RUPTURE. (b)

DR. MILLER, at the end of his little book on the "Cure of Rupture by Paraffin Injections," reports ten cases he treated by this method in 1905 and 1906. Cure resulted in each case, but apparently no patient was personally examined more than four months after the operation. The history in Case 8 concludes as follows:—"Personal communication one year later, making final payment for operation, patient cured and grateful."

The author has taken considerable pains to detail the technique, and makes clear the disadvantages of the procedure. Paraffin injection for the cure of hernia is only applicable where the protrusion is small, and, as the writer admits, the paraffin may give rise to trouble and discomfort. The book is instructive, but hardly convincing as to the efficacy of this method of treatment.

## LITERARY NOTES.

THE author of "Children of the Poor" has written a little book which should be welcomed by all who are interested in the betterment of the social conditions of the slum child. As medical officer to the Bournemouth Education Committee, and late Resident Medical Officer to the Cardiff Union Workhouse and Hospital, Dr. A. Davies Edwards writes as one who has seen and deplored the great amount of unnecessary misery and suffering which the children of the poor have to endure. Each of the earlier chapters is a clever and sympathetic little sketch of some aspect

(a) "Poisoning by Arseniuretted Hydrogen or Hydrogen Arsenide: Its Properties, Sources, Relations to Scientific and Industrial Operations, Symptoms, Post-Mortem Appearances, Treatment and Prevention." By John Glaister, M.D. Glasgow, L.R.C.P. and S. Edin., D.P.H. Cantab., F.R.S.E., Examiner in Forensic Medicine and Public Health for Diplomas in Medicine and Surgery, and for Diplomas in Public Health of the Scotch Triple Colleges. Pp. 279. Edinburgh: E. and S. Livingstone. 1908.

(b) "The Cure of Rupture by Paraffin Injections." By Charles C. Miller, M.D. Pp. 81. Chicago: Oak Printing Co. 1908.

of child life in the slums, and later the means of improving these conditions is dealt with from the point of view of the well-being of the nation, and on the broader basis of humanity. The book is delightfully written, and contains several good photographs.

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THE "Catechism Series" of Messrs. E. and S. Livingstone is well known to medical students in the *travail* of examinations as a most helpful way of assimilating that knowledge that is to ensure a pass. Part II. of "Chemistry (Inorganic and Organic)" has appeared in a new edition, revised and enlarged, to carry on the beneficent task of keeping the student hopeful of success at the beginning of his student days.

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LAST year we were treated to two volumes of "The Chemical Constitution of the Proteins," by R. H. Aders Plimmer, D.Sc. An addition to the same series ("Monographs on Biochemistry") on "The General Character of the Proteins" (2s. 6d. net), is contributed by S. B. Schryver, Ph.D., D.Sc., Lecturer on Physiological Chemistry in University College, London. A fourth volume on "The Vegetable Proteins," is by Thomas B. Osborne, Ph.D. (3s. 6d. net). The authors are well known as authorities on the proteins and their work will be read with interest by chemists and physiologists. These volumes are published by Messrs. Longmans, Green and Co.

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WE are promised during the next few days the officially authorised edition of the papers and proceedings of the Sixteenth International Medical Congress of Budapest. It will contain all the important communications presented to the Congress, the photographs and biographical notices of nearly all the members, presidents of sections, and other leading personages. This voluminous work, which is to be printed in several languages, will be sold at about 30s., and is obtainable exclusively at the Redaction of the Album of the Sixteenth International Medical Congress, Budapest, VI., Liszt Ferencz-ter, 4.

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"THE Sleeping Sickness Bureau," Royal Society, Burlington House, London, is about to publish in bibliographical form a work on "Trypanosomiasis," embracing original papers published prior to April, 1909, and references to works and papers on tsetse-flies, especially *Glossina palpalis*, *rob.-desv.*, compiled by Major C. A. Thimm. It will contain an almost complete list of references to the published works on sleeping sickness and the trypanosomiasis of man and animals from 1803 to March 31st, 1909, including also references to recent papers on the tsetse-flies. The price at which the book will be published (4s. net) is only sufficient to cover part of the expense of printing. Intending subscribers are requested to communicate with Arthur G. Bagshawe, Director of the Bureau.

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"OPHTHALMOLOGY," the quarterly review of ophthalmic science, the October number of which is before us, is an admirable publication, and although only still of comparatively recent origin, has attained to a firm position, through its excellence, among its competitors. The ophthalmic surgeon will find in its pages original articles of sound, practical interest, and abstracts of all the best work in his speciality, carefully and concisely written. Among the articles in the October number are "The Requirements and the Regulation of Signalling by Colour," "The Expression of Cataract in its Capsule" by the Editor, and "Unusual Complications in Cataract Extraction."

## MEDICAL NEWS IN BRIEF.

### New Medical Guild.

SIR JOHN TWEEDY, F.R.C.S., presided at a meeting held for the purpose of inaugurating a British Medical Benevolent Fund Guild, having for its object the assistance of distressed members of the medical profession, their wives, widows, and families. The inauguration

of such a Fund as was now proposed was, Sir John Tweedy remarked, a sad necessity, inasmuch as the medical man was often quite unable to make provision for his family, and without the benevolent fund, with which the guild to be formed would co-operate, his family would have nothing but the direst poverty before them. The assistance of ladies was urgently required to help the women and children of those who did more for the community at large than any other class.

Lady Tweedy described the objects of the Guild, and quoted a number of pathetic instances in which help had to be given by those ladies who had informally associated themselves with the work of the Fund.

Dr. West formally moved the establishment of the Guild. Lady Church seconded the motion, which was carried unanimously.

As a result of a motion proposed by Mrs. Scharlieb, and seconded by Mrs. Butlin, it was decided to draw up the rules of the Guild, and to appoint officers. We understand that members will be admitted on payment of a half-guinea subscription, and associates who will undertake the work of active co-operation, at 2s. 6d. Lady Broadbent was appointed President of the Guild, Lady Tweedy Chairwoman of the Council, Dr. Mary Thorne hon. treasurer, and Mr. Knox hon. auditor.

### Imperial Malaria Conference.

A CABLE from Simla states that the Imperial Malaria Conference has concluded its sittings and the conclusions and recommendations have been drawn up under six main heads. 1. The appointment by the Government of India of a Scientific Investigation Committee to be linked up with special organisations for dealing with malaria in each province, the investigations to be specially directed to the distribution of malaria in India, the epidemiology and endemology of the disease, and the actions of quinine and other remedies for malaria. 2. The checking by professional agency of the existing vital statistics to determine the exact causes of death. 3. Minor drainage operations, which are recommended when they are certain to be effective; the restriction of wet cultivation near towns, the introduction of fish into tanks and other collections of water, and the oiling of small collections of water, which cannot be filled up. 4. Detailed recommendations regarding the use of quinine, with reference to which the Conference advises that the drug be sold in quantities sufficient for the treatment of a case, as well as in piece packets, by all possible agencies, special efforts being made to induce private members to engage in its distribution, a liberal commission being allowed. 5. Education. On the suggestion of the President of the Conference, Sir Herbert Risley, it is recommended that committees of officials and non-officials, directed by the elected members of the new councils, be formed to spread among the people knowledge regarding malaria and the measures which it is possible to take against it. It is also recommended that the subject be taught in the schools. 6. Local governments should be invited to make an annual assignment of funds for malaria investigation and prevention.

### Remuneration of Medical Men Summoned on the Advice of Midwives.

In reference to the recommendations of the Departmental Committee appointed by the Lord President of the Privy Council to consider the working of the Midwives Act, 1902, which are as follows:—

"A secure expectation of payment should be given to a medical practitioner summoned on the advice of a midwife in a case of emergency. The Poor-law authority should be responsible for the payment, and should be empowered to charge the fee paid as 'relief on loan' to the patient;

"The scale of fees should be fixed by order of the Local Government Board on a systematic basis, having due regard to local conditions. In emergency cases, the system of a uniform fee, which should cover any ordinary after-attendance, is recommended for adoption, with the addition, perhaps, in scattered rural areas, of some allowance for mileage;

"The medical practitioner, in applying to the public authority, should be required to state that he has been unable to obtain payment of his fee from the patient or her representatives.

"A list of practitioners willing to respond to a midwives call should be prepared and circulated in every area";

The Midwives' Committee of the London and Counties Medical Protection Society recommends, and the Council of the Society has approved the recommendation:—"That, having regard to the proposed payment by Boards of Guardians of doctors called in to assist midwives, the London and Counties Medical Protection Society recommends the medical men in each Union to meet and confer on the subject, and to agree as to what fee, or fees, they will accept, and then combine to insist on such fee or fees being paid (or guaranteed) by the Guardians, and paid on the statement of the medical man that he is unable to obtain payment of his fee from the patient or her representatives."

#### Society for the Relief of Widows and Orphans of Medical Men.

A QUARTERLY Court of the directors of this Society was held on Wednesday last, Dr. Blandford, President, in the chair. Since the last Court, one of the vice-presidents of the Society, Sir Thomas Smith, Bart., has died, and a vote of condolence was passed from the chair. Sir Thomas Smith was elected a member in 1870, and had held the offices of director and vice-president. He had always taken the keenest interest in the welfare of the Society, and was a regular attendant at the quarterly Courts. One of the annuitants of the charity, a widow, had also died since the last Court. She came on the funds in 1907, and received in grants the sum of £145. The sum of £518 was voted to be distributed among the annuitants as a gift at Christmas, each widow to receive £10, each orphan £3, and the orphans in receipt of grants from the Copeland Fund £5 each. Membership is open to any registered practitioner who at the time of his election is resident within a 20-mile radius of Charing Cross. The subscription is 2 guineas per annum, or a member may become a life member by paying one sum, the amount of which is fixed by the by-laws of the Society. Relief is only granted to the widows or orphans of deceased members, and since the last Court six letters had been received from widows of medical men asking for relief, but this had to be refused, as their husbands had not been members of the Society. Application forms for membership and full particulars may be obtained from the Secretary, at 11 Chandos Street, Cavendish Square. The next election will be on January 12th, 1910. The invested funds of the Society now amount to £100,500.

#### Royal College of Physicians of London.

THE Royal College of Physicians announce the award of the Weber-Parkes prize and silver medal to Professor W. Camac Wilkinson, lecturer on medicine at the University of Sydney, for the best essay upon the prevention, pathology, or treatment of tuberculosis, especially in reference to pulmonary consumption in man; and also the award of a similar medal to Dr. Arthur Conyers Inman, of the Brompton Consumption Hospital, the essayist next in order of merit. The prize, which is of the value of 150 guineas, together with the medals, was founded in 1895 by Sir Hermann Weber, in memory of Dr. E. Alexander Parkes, and is awarded every third year.

#### Poisons and Pharmacy Act.

MR. SNOWDEN asked the Secretary of State if he was aware that town councils were issuing, in large numbers, licences to sell poisons under Section 2 of the Poisons and Pharmacy Act, 1908, in places where abundant facilities are provided by the shops of qualified chemists; and, in view of the statement made in this House by the Under-Secretary when the Poisons and Pharmacy Bill was under discussion, that licences would only be granted under Section 2 where reasonable facilities did not exist, would he take steps to stop the granting of such licences in violation of

that understanding and to cancel such licences as have been issued in contravention of it.

Mr. Gladstone, in reply, said: I am afraid I cannot add anything to the answers which I gave to questions by the hon. member on this subject on June 10th and 24th last. I have no power to control the action of the town councils, and I have already called the attention of the Privy Council Office to the allegations made.

#### British Medical Association.

THE *British Medical Journal* states that the Association has held its annual meeting in London on three occasions. The first was in 1862, when Dr. George Burrows was President; the second in 1873, when Sir William Ferguson was President; the third in 1895, when Sir J. Russell Reynolds was President. Mr. Butlin, who has already served the Association in many capacities, in particular as treasurer for six years, will be a worthy successor of these distinguished men. An announcement has already been made that it is anticipated that invitations will be given to the Association to hold the annual meeting in Birmingham in 1911, and in Liverpool in 1912.

#### Depopulation.

THE French *Journal Officiel* publishes statistics of the movement of population in France for the first half of the present year as compared with the same period last year. The chief figures are as follows:—

	1909.	1908.
Marriages ... ..	156,294	162,495
Divorces ... ..	6,148	5,605
Births ... ..	398,710	411,402
Deaths ... ..	426,913	401,894

Thus, there is a diminution of births of 12,692, and an increase of deaths of 25,019. The excess of deaths over births is 28,203, and if this proportion is maintained in the latter half of the present year the result will be even worse than in the year 1907—the sixth year since the Franco-German War in which the population of France has shown an actual diminution.

Baron d'Estournelles de Constant contributed to the *Matin* recently an interesting article on the subject. He is not a believer in prizes for large families, but he points out that the present fiscal legislation of France imposes, as it were, prizes for small ones. "It favours celibacy, childless homes, and the exploitation of woman. Childhood in France is not honoured as it is in other countries. We are disdainful toward our children; however few they may be, they seem to occupy too much room in the house. We send them out to nurse, and get rid of them until they have to go to barracks or get married. A father of a family is ridiculed. The family is taxed as a luxury, the unmarried man being positively let off lightly, as though he were a more useful servant of his country. The mother of a family cannot find employment; dogs and children are only admitted on sufferance into houses owned by respectable landlords."

#### The University of Liverpool.

At a meeting of the Faculty of Medicine held on 22nd October, the Dean announced the entries for the Winter Session as follows:—

Medical School.—New entries for Degree Courses, 23; new entries for Diploma Courses, 8, total, 31; total number of undergraduates registered, 132; new entries for the Diploma of Tropical Medicine, 19; new entries for the Diploma of Public Health, 13.

Dental School.—New entries for Degrees and Diplomas, 14; total number of dental students registered, 42.

#### Royal Sanitary Institute.

THE following have been admitted members of this Institution:—

S. N. Banerjee, I.M.S., Hospital, Salkea, Hourah, Bengal, India; John H. Garrett, M.D., D.P.H. (M.O.H.), Municipal Offices, Cheltenham; David D. Gold, M.D., C.M., D.P.H. (M.O.H.), Shirehall, Hereford; Thomas E. Holmes, M.A., M.D., B.C. Cantab., D.P.H.Lond., Nottingham; John Howard-

Jones, M.D., D.Sc., C.M. (M.O.H.), Health Dept., Newport, Mon.; Thomas H. Lovegrove, M.R.C.S., Perth, Western Australia; Harry Mason, M.B., Ch.B., D.P.H., Harrogate; Andrew Smith, M.D., L.R.C.S. Eng. (M.O.H.), Whickham, Durham; Donald Steel, M.B., Ch.B., Perth, Western Australia; John I. Taylor, L.R.C.P., M.R.C.S., Willesden Green, N.W.; John Utting, M.R.C.S., L.R.C.P., J.P., St. Anne's Hill, Liverpool; David E. Williams, L.R.C.S.I., L.R.C.P.I., Port Health Officer, Fremantle, W. Australia.

### PASS LISTS

#### Royal College of Physicians of London.

THE following candidates having passed the necessary examination of the Conjoint Examining Board, Licences to Practice were conferred on Thursday last:

Edward M. Adam, L.M.S., Stanley D. Adam, William A. Alexander, B.A.Cantab., Tom C. R. Archer, Enoch T. Atkinson, M.D., C.M.Toronto, Harry L. Attwater, B.A.Cantab., Cuthbert C. H. Binns, B.A.Cantab., Cuthbert J. Blaikie, B.A.Cantab., Norman A. Boswell, Thomas S. Bradburn, Rex C. Brewster, Lancelot Bromley, B.A.Cantab., Edward M. Browne, Sidney H. Browning, Edward S. Calthrop, Guy O. Chambers, Algernon E. P. Cheesman, William N. Child, M.A.Cantab., Eric A. Collins, William V. Corbett, Aston R. Dale, Max E. Dellschaft, B.A.Cantab., Anthony Dias, Daniel C. Druitt, Ernest A. Dyson, B.A.Cantab., Isaac M. Edis, Arthur O. English, Anthony Feiling, B.A.Cantab., Samuel C. R. Flaxman, Patrick C. Fowell, B.A.Oxon., Reginald C. H. Francis, Arthur J. Friedlander, Cyril G. Galpin, Harman J. H. Graves, Henry Gray, Frank M. Harvey, Guy F. Haycraft, Geoffrey R. Heard, Wilfrid L. Hibbert, Reginald H. P. Hick, Thomas T. Higgins, M.B., Ch.B.Vict., Richard Howey, M.B.Toronto, Gilbert P. Humphry, Harold E. Jeffreys, M.B., Ch.B. New Zea., Chhaganlal H. Kantawala, Bombay Univ., Rustom D. Kapadia, L.M. and S. Bombay Univ., Edward M. Lauderdale, B.A.Cantab., Ernest C. Lindsay, Arthur G. H. Lovell, Donald McCully, Daniel R. McDonald, M.D., C.M., Niel McDonald, M.B., Ch.B.Vict., Alexander E. McKenzie, Paulin J. Martin, Philip S. Martin, Leslie Meakin, B.A.Cantab., John M. Mehaffey, John Mellor, Robert M. Miller, B.A.Cantab., Claude H. Mills, Thomas A. Milroy, Douglas A. Mitchell, Hugh G. Monteith, B.A.Cantab., Alfred F. Morcom, B.A.Cantab., Frank C. Morgan, John F. H. Morgan, Willem Mulder, M.D.Utrecht, Clive Newcomb, B.A.Oxon., Bertram C. N. O'Reilly, John G. Owen, William H. Peacock, M.B., B.S.Durh., Guy H. Peall, Richard B. Philipps, Edward H. Rainey, Edward L. N. Rhodes, B.A.Cantab., Robert S. Richardson, M.B.Toronto, John L. Ritchie, Charles D. Roberts, Cecil J. Rogerson, Christopher Rolleston, Charles E. F. Salt, Edward A. Seymour, Clement E. Shattock, James S. Simpson, M.D., C.M.McGill, Frank L. Smith, Henry S. C. Starkey, B.A.Cantab., Lawrence Storey, M.B., Ch.B.Glas., Arnold W. Stott, B.A.Cantab., Charles H. S. Taylor, B.A.Cantab., Henry H. S. Templeton, Richard M. R. Thursfield, B.A.Cantab., Francis C. Tibbs, Karl J. Titlestad, William W. C. Topley, B.A.Cantab., Charles E. Walker, M.Sc. Liv., Sidney H. Ward, Arthur A. M. Werapernall, L.M. and S.Ceylon, Charles F. Willes, Gwilym A. Williams, B.A., Thomas J. Williams, Charles S. Wink, Kenneth Wolferstan, Duncan Wood, James C. Woods.

#### Trinity College, Dublin.

THE following candidates have passed the Preliminary Scientific Examination, Michaelmas Term, 1909:—

Physics and Chemistry.—Theodore Allen, Robert A. Flood, Reginald H. Jones, William Foot, Joseph Harvey, John W. C. Stubbs, John A. MacMahon, Rupert C. Lowe, Henry C. D. Miller, Hawtrey W. Browne, Kathleen D. Wallace, Eleanor Taylor.

Botany and Zoology.—Amos G. Varian, John T. McCullagh, George S. McConkey, Joseph Harvey, Ernest Bantry White, Hilda M. B. Marsh, Frederick R. Sayers, Michael J. Ryan, Bertram Sheridan, Frederick A. Sparling.

Intermediate Medical Examination—Part I.—William O. W. Ball, William P. Croker, Walter Crane, Jane F. Colquhoun, Maurice Horan, Marjory Chapman, Charles F. Judd, James N. G. Nolan, Francis V. Agnew.

Previous Dental Examination.—Anatomy and Institutes of Medicine.—Henry Kirk.

The following candidates have passed in the Final Medical Examination, Michaelmas Term, 1909:—

Part I.—Harry H. James, passed on high marks; Charles O'Brien, Hugh R. M. Ferguson, Hans Fleming, Gervase W. Scroope, Cecil Grene, James H. Crane, Victor G. Best, William M. Johnstone, Charles D. Hanan.

Jurisprudence and Pathology.—John W. Tomb.

Pathology (supplementalist).—John G. Ronaldson.

Intermediate Medical Examination.—Part II.—

Jacobus M. S. Gericke, passed on high marks; Antonie C. Redelinghuys, Oswald C. S. Tandy, Robert G. Ball, William A. Taylor, Henry P. Harpur, Maurice Horan, James C. Kelly, Humphrey L. Blackley, Herbert G. Holdbrook, Leonard Shiel, Edward H. P. Murphy, Charles F. Judd.

#### Conjoint Examinations in Ireland.

THE following candidates have passed the Preliminary Examination of the Royal College of Physicians and the Royal College of Surgeons:—

S. H. Bannerman, W. J. Broderick, A. F. Carbury, J. Daly, T. Flynn, J. Fox-Russell, G. P. Healy, J. J. Hutton, M. J. B. Kennedy, Miss M. Lees, P. S. McCabe, A. McCawley, J. A. Musgrave, J. O'Carroll, E. O'Keeffe, F. J. Power, A. Porter, G. M. C. Powell, F. J. Robinson, N. A. K. Sparrow, T. H. Sarsfield, W. J. Sweeney, H. J. Swan, P. W. Walsh, S. Weinstock, L. E. Wigoder.

The following have passed the First Professional Examination:—

J. P. Brennan, B. J. Cusack, J. J. L. Cox, H. A. S. Deane, E. G. Foley, A. B. Foot, R. F. J. Griffith, R. Green, J. F. Lyons, D. McEntire, R. J. May, C. J. O'Carroll, H. V. O'Donoghue, P. Rowan, T. F. Ryan, G. N. Smyth, R. Tivy.

The following have passed the Second Professional Examination:—

M. J. Ahern, A. J. Best, C. M. G. Campbell, T. J. Kelly, D. Murphy, G. Sheehan, G. A. Shiel, W. Waugh.

THE following candidates have passed the third Professional Examination of the Royal College of Physicians and the Royal College of Surgeons, October, 1909:—F. M. J. Byrne, T. Farrell, M. Golding, E. Holden, F. Hannigan, F. P. Kennedy, P. B. Kelly, N. Keating, A. G. MacIlwaine, W. G. Maguire, P. H. McDonough, C. Molan, B. O'Donnell, T. P. O'Reilly, T. F. O'Donnell, K. O'Sullivan, J. B. Power, L. C. Rorke, P. Ross-Todd, J. V. Ryan, L. W. Roberts, J. C. Scanlan.

#### Royal Colleges of Physicians and Surgeons of Edinburgh and Faculty of Physicians and Surgeons of Glasgow.

THE following candidates having passed the Final Examination, were admitted L.R.C.P.E., L.R.C.S.E., and L.F.P. and S.G.:—

Frederick B. Carvalho, Raghunath A. Barve, Richard D. Neagle, Harold H. Field-Martell, Martin Remers, Anthony F. Henriques, Kuppusami T. Nath, Reginald A. Hosegood, William R. MacKenzie, Sydney Sharples, Beatrice Coxon, George B. Moon, Rupert V. Dias, Dinshaw B. Gazdar, Maud D. Fére, Howard V. A. Gatchell, and Fritz C. Eberhardt; and 3 passed in Medicine and Therapeutics, 7 in Surgery and Surgical Anatomy, 9 in Midwifery, and 21 in Medical Jurisprudence.

WE understand that a movement is on foot to commemorate in fitting fashion the connection of the late Professor Daniel John Cunningham with Trinity College, Dublin. A meeting of those interested will be held next Wednesday, November 10th, in the Medical School, Trinity College, the Provost in the chair.

## SUMMARY OF RECENT MEDICAL LITERATURE, ENGLISH AND FOREIGN.

*Specially compiled for THE MEDICAL PRESS AND CIRCULAR.*

[SPECIALLY REPORTED FOR THIS JOURNAL.]

**A Case of Struma Ovarii.**—Frank (*Amer. Journ. of Obst., LX., 3*). The patient, æt. 22, had been married 8 months, and never been pregnant. The sole complaints were backache and leucorrhœa. A curettage was first performed, and then the abdomen opened, and a tumour the size of a peach, involving the right ovary, easily removed. The tumour was ovarian in shape, irregularly bossed, and enclosed in a thickened tunica albuginea. On cross-section the growth was seen to be composed of irregular angular cysts, greatly varying in size, filled with colloid material. At one pole there was a hard, bony shell, containing a molar tooth. Microscopical examination of the growth showed the dense hæmorrhagic area to be a corpus luteum, with hæmorrhagic infiltration. The bone was normal. The rest of the tumour was identical with colloid goitre. In some parts the acini were of normal size, but closely crowded together, and containing little colloid. In a few spots there was slight tendency to atypical adenomatous growth. The greater part of the growth was formed by irregular cysts filled by colloid material, and lined with a single layer of low cubical epithelium. F.

**A Case of Decidual Expulsion Occurring at Each Menstrual Period.**—Frank and Scroggs (*Amer. Journ. of Obst., LX., 3*).—A woman, æt. 27, had given birth to a child when 24. Since then she had at her menstrual periods severe pains like labour pains, and was only relieved after the expulsion of a cast-like membrane, before which a bloody discharge began. On three occasions her physician attended her, and saw a complete membranous cast of the uterine cavity, and on two other occasions, while under observation, similar casts were expelled. The surface of the cast is finely granular, and, on opening it, both tubal cornua can be seen, and the internal surface shows granular elevations. The membrane is more than 1 cm. thick. The histologic examination shows a marked decidual formation, with differentiation both in the spongy and compact layers; the decidual cells are generally round and sharply defined with deeply staining nuclei. There is always a diffuse infiltration of round cells, and some very compact islands; many of the blood-vessels and sinuses show thrombosis. The diagnosis of an acute inflammatory condition is made on account of the islands of lymphocytes. This membrane is not such as is found in cases of dysmenorrhœa membranacea, but a true decidua, although no part of an ovum was found. F.

**A Case of Syphilis without a Primary Chancre.**—Magian (*Brit. Med. Journ., September 11th, 1909*) reports that two years ago a gentleman informed him that he was afraid he had contracted a venereal disorder three days previously. Sexual congress was brief, and patient had washed himself immediately afterwards. He became suspicious on noticing a rash on his partner's arm. He had only once had sexual intercourse two and a-half years previously, with no untoward result. He was to be married the following day. As, against advice, he had intercourse with his wife, he became very nervous, and insisted on being daily examined by the writer for any signs of venereal disease. As the patient was afraid of extra-genital chancres, he was completely examined twice a week. At the end of eight weeks the examination was made once a week. The writer is convinced that nothing had been overlooked. There was no suspicion of chancre or sore of any kind on any part of the patient's body. The urethra, rectum, and mouth were equally free from disease. Yet at the beginning of the eleventh week he appeared with the body covered with a roseolar rash. Sore throat, loss of hair, iritis, periostitis of the tibia, gumma of the testicle followed. After 12

weeks his wife aborted of a three months' fœtus. Soon after she broke out into a pustular eruption, suspected her husband, and left him. Subsequently the husband went back to his former mistress, and the writer saw him again suffering from a Hunterian chancre on his glans penis, where he was re-infected in a period under two years with the same disease. S.

**The Common Cold.**—Campbell (*Practitioner, October, 1909*) discusses this often trivial yet always annoying complaint. The condition may be due to purely nervous causes, but is most frequently due to some specific bacterial infection. The common organisms which cause a "cold" are Friedlander's bacillus, the bacillus septicus, the bacillus of influenza, and the micrococcus catarrhalis. These organisms give rise in the susceptible to specific febrile disorders, but, unlike the exanthemata, these disorders do not confer immunity for more than a very limited period, sometimes for not more than a few weeks. As regards treatment, something may be done by the ordinary orthodox methods to relieve the symptoms, but, in spite of the treatment, the disease usually runs its course. By prophylactic treatment much may be done. Besides a careful observance of the ordinary rules of hygiene, care should be taken to see that the upper air passages, especially those of the nose, are in a healthy state. Much may also be done by regulating the diet. Both over-eating and the eating of wrong kinds of food are said to engender the catarrhal diathesis. The supply of starch and sugar in the diet should be especially limited. Undoubtedly the most scientific and satisfactory way of treating this class of disorders is by means of vaccines, by which we may not only cut short an acute cold, but also confer a considerable immunity against future attacks. Except in cases of infection by the bacillus septicus there are few cases of common cold that can be treated by the ordinary stock vaccine, and it will generally be necessary to have a vaccine specially prepared from the organism by which the patient is infected. One should always begin with a small dose, about 120-million organisms, and increase in subsequent injections according to the progress of the patient. In acute cases one should avoid any reaction, but in chronic cases a slight reaction is sometimes beneficial. K.

### Medical Sickness and Accident Society.

At the usual monthly meeting of the Executive Committee of this Society, Dr. de Havilland-Hall was in the chair.

The accounts presented show, as usual, a great falling off in the sickness claims, both in number and duration during the summer months, as compared with the experience of the winter. In a Society formed for the most part of medical men in general practice, and therefore liable to exposure to bad weather, it is clear that such a result as this must be looked for.

The financial results of the year's working have so far been very satisfactory, and as in every previous year of the Society's history, a substantial addition has been made to the invested reserves.

### Cholera.

CHOLERA appears to be steadily fighting all the precautions which are being taken to keep it out of Western Europe. Cases of this disease are to be found in Eastern Prussia, and it is said that several deaths from cholera have occurred near Antwerp, the infection having been brought in these latter cases by Dutch-boatmen.



## NOTICES TO CORRESPONDENTS, &c.

**FOR CORRESPONDENTS** requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

### SUBSCRIPTIONS.

SUBSCRIPTIONS may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s.; post free at home or abroad. Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially-appointed agents. Indian subscriptions are Rs 15.12. Messrs. Dawson and Sons are our special agents for Canada.

### ADVERTISEMENTS.

**FOR ONE INSERTION**—Whole Page, £3; Half Page, £2 10s.; Quarter Page, £1 5s.; One-eighth, 12s. 6d.

The following reductions are made for a series:—Whole Page, 13 insertions, at £3 10s.; 26 at £3 3s.; 52 insertions at £3, and pro rata for smaller spaces.

Small announcements of Practices, Assistances, Vacancies, Books, &c.—Seven lines or under (70 words), 4s. 6d. per insertion; 6d. per line beyond.

**QUACKERY LAW.**—When Mr. Darker's article was in type it was found that the function of the General Medical Council was not put in the Council's powers are chiefly used internally against the profession. The Medical Defence Union taking on the Council's function as to outsiders.

**SENIOR STUDENT.**—There can be no better preparation for general practice than a twelve months' experience as house surgeon in a general hospital; and a man with the personal qualities of a gentleman and with capital, can usually find a partnership in a good general practice if, besides being really well qualified, he possesses the confidence which experience brings.

**A CHICAGO SUBSCRIBER.**—The efficiency of British laws (good as most of them undoubtedly are) depends upon parochial authorities; and, whilst the supervision of foods and drugs is effectual in some localities, the laws are in many places either altogether ignored or very laxly administered.

### LIFE AND DEATH.

A CORRESPONDENT sends the following:—

"The world is like a railway station,  
Where we all arrive and leave.  
When we come congratulation,  
When we go how few to grieve!  
Yet, we all must die alone,  
Destiny of each unknown!  
Life is but transition state,  
Everyone must bow to fate."

A. D.

**A CANDIDATE.**—The Indian Medical Service affords to superior men opportunities for advancement in some directions superior to those in the R.A.M.C.

**MATER.**—It is easy to find in most neighbourhoods a family doctor upon whom reliance may be placed; and it is best to ask his advice always before choosing a specialist when one is really required.

**WINTER CLIMATE.**—Algiers is easily reached *via* Marseilles, and there are English physicians resident there.

## Meetings of the Societies, Lectures, &c.

### WEDNESDAY, 3RD NOVEMBER.

**MEDICAL GRADUATES' COLLEGE AND POLYCLINIC** (22 Chenies Street, W.C.).—4 p.m.: Mr. A. P. Gould: Clinique (Surgical). 5.15 p.m.: Lecture: Dr. A. E. Giles: The Menopause, Natural and Artificial.

**NORTH-EAST LONDON POST-GRADUATE COLLEGE** (Prince of Wales's General Hospital, Tottenham, N.).—Clinics: 2.30 p.m.: Medical Out-patient (Dr. T. R. Whipham); Skin (Dr. G. N. Meachen); Eye (Mr. R. P. Brooks). 3 p.m.: X-Rays (Dr. H. Pirie).

### THURSDAY, 4TH NOVEMBER.

**NORTH-EAST LONDON CLINICAL SOCIETY** (Prince of Wales's Hospital, Tottenham, N.).—4.15: Clinical Meeting.

**ROENTGEN SOCIETY** (20 Hanover Square, W.).—8.15 p.m.: Ordinary General Meeting.

**ROYAL COLLEGE OF PHYSICIANS OF LONDON** (Pall Mall East).—5 p.m.: Sir T. Clifford Allbutt, K.C.B.: Greek Medicine in Rome. (Fitz-Patrick Lecture.)

**MEDICAL GRADUATES' COLLEGE AND POLYCLINIC** (22 Chenies Street, W.C.).—4 p.m.: Sir Jonathan Huthinson: Clinique (Surgical). 5.15 p.m.: Lecture: Dr. L. Guthrie: Some Nervous Affections in Children.

**NORTH-EAST LONDON POST-GRADUATE COLLEGE** (Prince of Wales's General Hospital, Tottenham, N.).—2.30 p.m.: Gynaecological Operations (Dr. A. E. Giles). Clinics: Medical Out-patient (Dr. A. J. Whiting); Surgical Out-patient (Mr. Carson). 3 p.m.: Medical In-patient (Dr. G. P. Chappell).

**ST. JOHN'S HOSPITAL FOR DISEASES OF THE SKIN** (Leicester Square, W.C.).—6 p.m.: Chesterfield Lecture: Syphilis: History and Primary Invasion (Constitutional, Local). Eruptions, Erythematous: I., Macular; and II., Maculo-Papular.

### FRIDAY, 5TH NOVEMBER.

**ROYAL SOCIETY OF MEDICINE (LARYNGOLOGICAL SECTION)** (20 Hanover Square, W.).—5 p.m.: Cases and Specimens will be exhibited by the following:—Mr. Seccombe Hett, Dr. Dan

McKensie, Dr. StClair Thomson, Dr. Jobson Horne, Mr. Stuart-Low, Dr. Dundas Grant, Dr. Dundas Grant and Dr. Dan McKensie, Dr. Irwin Moore, Dr. Clayton Fox, Mr. E. B. Waggett, Dr. Scanes Spicer.

**ROYAL SOCIETY OF MEDICINE (SECTION OF ANÆSTHETICS)** (20 Hanover Square, W.).—8.30 p.m.: Paper: Dr. Vivian Orr: Heart Massage in Chloroform Syncope. Short Communication: Dr. R. H. Hodgson: An Apparatus for the Administration of Ether by the Open Method.

**MEDICAL GRADUATES' COLLEGE AND POLYCLINIC** (22 Chenies Street, W.C.).—4 p.m.: Dr. J. Horne: Clinique (Ear, Nose, and Throat).

**NORTH-EAST LONDON POST-GRADUATE COLLEGE** (Prince of Wales's General Hospital, Tottenham, N.).—10 a.m.: Clinio: Surgical Out-patient (Mr. H. Evans). 2.30 p.m.: Operations (Mr. W. Edmunds). Clinics: Medical Out-patient (Dr. A. G. Auld); Eye (Mr. R. P. Brooks); Skin (Dr. G. N. Meachen). 3 p.m.: Medical In-patient (Dr. R. M. Lealie).

**CENTRAL LONDON THROAT AND EAR HOSPITAL** (Gray's Inn Road, W.C.).—3.45 p.m.: Lecture: Mr. Stuart-Low: Accessory Sinuses.

### TUESDAY, 9TH NOVEMBER.

**CENTRAL LONDON THROAT AND EAR HOSPITAL** (Gray's Inn Road, W.C.).—3.45: Larynx: Dr. A. Wylie.

## Appointments.

**BENNER, ALBERT E., M.B., Ch.B. Edin.**, Senior House Surgeon to the Blackburn and East Lancashire Infirmary.

**CLAYTON, F., M.D., M.R.C.S., L.R.C.P. Lond.**, House Physician to University College Hospital.

**DAVIES, T. B., M.B., B.S., M.R.C.S., L.R.C.P. Lond.**, House Physician to University College Hospital.

**EMANUEL, J. G., M.D., B.S., B.Sc. Lond.**, M.R.C.P. Lond., Honorary Physician to Queen's Hospital, Birmingham.

**FRASER, FORBES, F.R.C.S. Eng.**, Honorary Surgeon to the Royal United Hospital, Bath.

**MAURICE, W. B., M.R.C.S., L.R.C.P. Lond.**, Certifying Surgeon under the Factory and Workshop Act for the Marlborough District of the county of Wilts.

**NIXON, SIR CHRISTOPHER, Bart., M.D. R.U.I., F.R.C.P. Irel.**, Professor of Medicine in the University College, Dublin.

**STYKS, HAROLD W., M.B., B.S.**, Senior House Surgeon to the Ingham Infirmary, South Shields.

**WALKER, A. S., M.B., Ch.B. Edin.**, Medical Officer to the Leith School Board.

## Vacancies.

**Nottingham General Dispensary.**—Assistant Resident Surgeon. Salary £160 per annum, with apartments, attendance, light, and fuel. Applications to C. Cheesman, Secretary, 12 Low Pavement, Nottingham.

**Kent County Asylum, Chartham.**—Third Assistant Medical Officer. Salary £145 per annum, with board, quarters, attendance, and washing. Applications to Medical Superintendent, Chartham, near Canterbury.

**Staffordshire County Asylum, Cheddleton, Leek.**—Senior Assistant Medical Officer. Salary £250 per annum, with board, apartments, and washing. Applications to the Medical Superintendent.

**Staffordshire County Asylum, Cheddleton, Leek.**—Junior Assistant Medical Officer. Salary £200 per annum, with board, apartments, and washing. Applications to the Medical Superintendent.

**The Hospital for Sick Children, Great Ormond Street, London, W.C.**—Fourth Anæsthetist. Honorarium of £15 15s. voted on the expiration of each year of office. The sum of £6 6s. is also voted to provide a substitute during three weeks in the summer. Applications to the Secretary.

## Births.

**COUTTS.**—On Oct. 27th, at 29 Surrey Street, Norwich, the wife of D. K. Coutts, F.R.C.S., of a daughter.

**LUMSDEN.**—On Oct. 24th, at 4 Fitzwilliam Place, Dublin, the wife of J. Lumsden, M.D., of twin daughters.

**TURNER.**—On Oct. 25th, at Park House, Church End, Willenden, London, N.W., the wife of W. E. Turner, M.R.C.S., L.R.C.P., of a son.

## Marriages.

**HAYNE-MORISON.**—On Oct. 30th, at Holy Trinity, Paddington, Louis Brightwell Hayne, M.D., of Harrogate, second son of Henry Hayne, Tunbridge Wells, to Margaret Lillias Morison, daughter of the late Murdoch Shaw Morison and of Mrs. Morison, of 17 Orsett Terrace, Hyde Park, London.

**HIND-BIGG-WITHER.**—On Oct. 26th, at St. Mary's Church, Shalford, near Guildford, Henry Hind, F.R.C.S., to Helen, only daughter of Colonel and Mrs. A. G. Bigg-Wither, of Tithams, Godalming.

## Deaths.

**EMBLETON.**—On Oct. 27th, at 2 Whitehill Hill, Hampstead, Eva O. J., wife of the late Dennis Embleton, M.D., M.R.C.S., L.R.C.P., of Bournemouth.

# THE MEDICAL PRESS AND CIRCULAR.

"SALUS POPULI SUPREMA LEX."

Vol. CXXXIX.

WEDNESDAY, NOVEMBER 10, 1909.

No. 19.

## NOTES AND COMMENTS.

**An Underground Cure for Asthma.** YEARS ago in London one of the popular cures for asthma took the form of travelling in the underground railway. It was conjectured in some medical quarters, we remember, that possibly the sulphurous fumes with which the tunnels were charged might really have had some beneficial effect on the disease. One enterprising railway porter, so it was recorded long ago in the columns of this very journal, went so far as to make pills out of the soot scraped from the walls of the underground railway near King's Cross, where the air was always thick with sulphur. Report went that he did a thriving trade with these pills. Now that the railway in question is electrified the air is no longer sulphurous and the walls no longer begrimed with soot. Its fame for the cure of asthma has departed, but, wonderful to relate, it has found refuge in a neighbouring tunnel, namely, that of the Central London "tube" railway. It was solemnly announced last week in the pages of a London daily newspaper that the mother of a well-known duchess was in the habit of travelling on the line in order to get relief for her asthma. Although it is within the bounds of possibility that the locality may provide the remedy in some rare individual instances, it is impossible to believe that a new cure of any general value has been discovered therein. It is quite refreshing to find so simple and harmless a cure advertised in a London newspaper.

**A New "Cure" for Asthma.** THE recent exposures of quack remedies, show that nothing is too worthless or inert to be sold as a "cure," and no method of treatment too palpably ridiculous to bring in a harvest to those who exploit it. Thus, one of the most widely-advertised quack nostrums of modern times, advertised to cure several score maladies, has been shown to consist of sugar pellets, pure and simple. Could the force of cynical knavery further go? Curiously enough, wealthy and well-educated people are just as easily gulled as the poor and the ignorant, although it may be assumed in smaller numbers. One of the favourite diseases of the patent-medicine men is asthma, a symptomatic trouble that is apt to bring its own relief, and for which there are a host of orthodox remedies. As every medical man knows, asthma often follows a mysterious course. A patient may suffer in the country and be free in a slum; he may be a martyr in one quarter of the town and become immune in another; or he may find relief by merely changing house to the opposite side of the street. All these

vagaries furnish a fine vantage ground, not only for the wily quack, but for the numberless persons who are always on the look-out for this, that, or the other royal road to the cure of their own or of other folks' diseases.

THE death is reported of Dr. **A Mafeking Medical Hero.** William Andrew Hayes, an Irishman, who first came into prominence as the principal medical officer during the famous siege of Mafeking. He had a large and varied experience during his comparatively short span of 48 years, which came fitly to an end in the town of the historic siege. The story, as recalled in the London papers, reminds us that in August, 1899, Dr. Hayes hurried back to the Cape from England, whither he had come on business. In his own mind he was convinced that war must break out, indeed, he ordered a large supply of dressings and other medical stores to Mafeking, which he reached late in September. Unluckily, there was no time to execute his orders, and he shortly afterwards found himself in responsible medical charge of a besieged town, with only two qualified medical men to help him, namely, Major L. E. Anderson and Mr. T. W. Hayes, and an absolute shortage of all ordinary hospital stores. How the situation was met every Englishman knows. Not the least wonderful of Dr. Hayes' feats was the organisation of a nursing staff from among the ladies of the town, delicately nurtured as they were and unaccustomed to the sights and sounds of army medical work at the front.

**Mafeking Nurses.** It was the present writer's fortune to be acquainted with one of these ladies, who lost her husband during the siege. On Sundays it was the custom of the Boers to cease firing, but on one occasion they were annoyed at some frivolity that had gone on in the town, and they re-opened fire. The lady's husband was shot through the body while riding on a bicycle. He was able to go home and give directions as to his affairs before going into hospital. After a few hours severe abdominal pain set in, and he died not long afterwards. Among the many instances of recovery from serious wounds was one recorded by Dr. Hayes of a Cape policeman who was shot through the liver. He was compelled, almost forcibly, to lie in bed for a week; and though in much pain, he constantly begged to be allowed to return to duty, in order that he might "wipe out the insult." At the time of his death Dr. W. A. Hayes was a medical officer of the Cape Government and a surgeon-lieutenant of the Bechuanaland Rifles. His brother, Mr. T. W. Hayes, is district surgeon at Mafeking and a surgeon in the Cape Mounted Police.

**"Doctor's Singular Letter."** FROM a provincial paper, under the above heading, we learn that on the 2nd inst., Mr. Kenrick, Coroner for East Denbighshire, held an inquest on the body of a woman who, after partaking of her tea in the afternoon, suddenly fell down and expired. Dr. Moss, of Wrexham, was called in, but the poor creature was already dead on his arrival. Dr. Moss was not summoned to the inquest however. The Coroner said he had written to Dr. Moss about the case, and had received the following reply:—"Dear Mr. Kenrick,—I was called to see Mrs. Phoebe Jones, of 84 Vernon Street, Wrexham, shortly after five o'clock. On my arrival she was dead. I cannot say what was the cause of death, but the commonest causes of sudden death are heart affections, brain lesions (especially pontine hæmorrhage), aneurysms, perforations of the abdominal viscera, poisonings. You can take your choice out of this lot. Yours sincerely, E. Moss." The jury returned a verdict to the effect that the cause of death was heart failure. Now, will any unbiassed individual say that the verdict here given was of the slightest value, and that the fees paid, or to be paid, to officials of the court were not so much money thrown away? To make the inquest of any value, the doctor ought to have been summoned in due course, and facilities should have been afforded for arriving at a scientific conclusion. This would have cost the county a fee, but without it the fees it had to pay were so much money wasted. When coroners give their valuable services "free gratis," it will then be quite time enough for them to expect doctors to be equally altruistic. The letter quoted appears to be a kind of protest against being expected to do professional work for nothing. It would be a good and proper thing for doctors to have at hand a printed form of reply suitable for such unreasonable requests.

## LEADING ARTICLES.

### A NEW MEDICAL SERVICE.

It is unnecessary to remind medical readers of the existing Services open to our profession—the Army, Navy, India, Poor-law, and so on. The doctors in the employ of our West African possessions have, however, been evolved into a Service on sound basis. Time was when the only European medical aid to be had on the West Coast of Africa was that of some half-sporting, half-exploring medico who had come out on a ship and who had made up his mind to stay a while. In Sierra Leone, the Gold Coast, and in Lagos, he became, or his place was taken long ago by the colonial surgeon, but in Southern Nigeria the extinction of the independent doctor occurred only about fifteen years ago. Now all the colonial doctors have been chosen by the Secretary of State for the Colonies, and the West African Medical Staff is the result. The difficulty that arose was that for the proper management and success of medicine on the Coast, especially in the matter of sanitation, co-ordination became absolutely necessary. For this the head at home—viz., the Secretary of State, should be able to seek authoritative advice. Early this year a Colonial Office Departmental Committee on the West African Medical Staff sat, and its Report was presented to both Houses of Parliament, by command of His Majesty, in July, 1909. This Committee

prefaced its Report by urging that it appeared from the evidence they had taken that the medical officers wished to make the Colonial Medical Service their career, and that they "have therefore based their Report upon the hypothesis that it is desirable to encourage medical officers to make the West African Service their permanent career." The essence of the Report is, that an Advisory Medical Board should sit in London to advise the Secretary of State on medical or sanitary questions which he may wish to refer to them. Such questions might comprise schemes for drainage and water supply, plans for the prevention or stamping out of epidemic disease, bacteriological research, selection of candidates, courses of study, and so on. This Board has now been formed, and it should be the means, not only of securing for the 160 medical officers of the West African Medical Staff a real opportunity, but may very well be the nucleus or germ of a very much larger body in the future. At the same time facilities are to be given for the principal medical officers of each Colony to meet on the Coast and confer "on the spot," as it is called in this country. By this means a uniform, continuous and determined effort will be made to combat all those lowly organisms which the ever present heat and moisture foster, and which, when they find man a suitable host, give expression in what is called disease.

## CURRENT TOPICS.

### The Progress of Cremation.

CREMATION is not making as much headway in the United Kingdom as its supporters maintain the movement deserves. Last year cremations in this country numbered 871 against 795 in the previous year. In Germany the number in 1908 was 4,050, as compared with 2,977 in 1907. The returns of the Manchester Crematorium state that last year there were 117 cremations, the total number of cremations since the opening of the Crematorium in 1892 has been 1,319; reduced fees were accepted in 46 cases. The interest of the general public in inspecting the Crematorium still continues to manifest, and during the year 1,130 visitors were admitted on payment of a small fee. There is little active opposition to cremation, though the feeling that it was un-Christian still had some hold. Yet the Bishop of Manchester and his two predecessors and many clergymen of all denominations believed in cremation. So far as the sanitary aspects of cremation are concerned, there can be no question that its position is unassailable, and that the wisdom of many prehistoric and ancient races in that particular has been amply vindicated by latterday science. But the action of reason against prejudice and sentiment, needless to remark, is often of the slowest.

### Reform of the Poor-Law.

WITH publication last week of the section dealing with Scotland the Report of the Royal Commission on the Poor Laws is now complete. In this Report the medical profession are interested as patriotic

citizens anxious for the welfare of the State, and as civil servants playing an important part in administration of the laws in question. No class can be in a position to recognise so well as the medical profession the need for reform of our present system; it is wasteful, it is demoralising, it is cruel. From end to end it is entirely indiscriminating. It matters not whether the tramp or wayfarer be a decent working man or an idle, vicious professional beggar, exactly the same treatment is meted out to him in the casual ward. It matters not whether the poverty-stricken applicant for help has been brought low by unavoidable and undeserved misfortune, or pauperised by drunkenness, idleness, and improvidence, exactly the same treatment is applied, whether in the form of outdoor or indoor relief. And the same confusion prevails throughout. The first step in reform must consist in a sorting out of the classes of paupers, and application of the proper treatment to each variety. The physically, morally, and mentally unfit, the different classes of temporary and permanent "unemployables" must be taken in hand, and dealt with according to the causation of their respective conditions. A great many of the problems which confront us have been solved in countries of Western Europe, and there can be no difficulty in adapting many of their methods to meet the requirements of our own people while respecting the feeling for the liberty which is supposed to dominate the British public. The question of Poor-law reform is not a party one; it must be taken in hand speedily by whatever Government is in power. The construction of effective laws will need the co-operation and the advice of the medical profession; co-operation of experts in medical Poor-law administration, and advice of experts in problems of public health bound up in the whole question of pauperism. In the end the status of the Poor-law medical officer must surely be improved; it cannot, at any rate, be easily made worse than it is at present.

#### Administration of Public Health Acts.

FROM week to week this subject is before readers of the Medical Press. Illustrations are constantly appearing of the enormous improvement in the public health, which, on the whole, has been brought about by the sanitary legislation of the last fifty years, whilst an equal number of illustrations are at the same time provided of how much more could be achieved if the authorities responsible for the sanitary condition of their districts would perform even a fair part of their duty. This lax administration inflicts hardships almost alone upon the poor, and for this reason mainly it is so often ignored by classes of the public who ought to be responsible. These facts are either forcibly stated or suggested in a letter in which the Duke of Northumberland replies to a group of tenants under notice to quit certain cottages ordered to be closed by the magistrates. The tenants had tried to get other houses, but had failed to do so, and had asked for an extension of time. The Duke points out that the blame in these cases rests entirely upon the local authorities. With some exceptions they have

gone to sleep, and have allowed houses which were old and dilapidated half a century ago to get worse and worse; they have neglected to see that dwellings more recently erected have been adequately maintained; they have failed to provide houses for ejected tenants before condemning the only habitations available. The neglect of generations cannot be remedied merely by closing houses and turning the occupants into the streets. If the Housing Bill now going through its final stages in Parliament should become law, it is possible some of these evils may be put an end to. It will, perhaps, provide means of rousing local authorities to a sense of their duty, and of putting pressure upon or coercing any that show themselves recalcitrant.

#### An Illustration from Wales.

WHILST the foregoing paragraph is being penned there comes to hand from a respected medical correspondent in the county a description of the condition of certain villages near the town of Carnarvon, as revealed in a recent report by the Medical Officer of Health, Dr. E. Le Parry Edwards. A large number of houses in these villages are seriously defective; many of them are back-to-back, and with wholly inadequate "sanitary arrangements." There are windows that do not open, and a total absence of ventilation, due to blocking up of chimneys. Over-crowding and mixing of the sexes prevail, including conditions worse than the medical officer had ever seen, "either among blacks or white men." The District Council was asked to give a peremptory order to close the worst of these; and but for the scarcity of proper dwellings in the district, the Council would have been urged to issue closing orders in a large proportion of cases. The discussion at the Rural District Council contributed some suggestive observations. It was affirmed, without contradiction, that the district was no worse than others in the county, whilst one councillor "feared that ties of friendship too often rendered it difficult for that and other public bodies to set the law in motion." In other words, the Councils are declared capable of sacrificing the welfare of the poor and helpless classes in order to serve the sordid ends of their personal friends. This is a charge which it might be thought would have been left to be brought by the enemies of the Councils; formulated and expressed by a friend without protest from the other members, no one can possibly venture to deny its truth. Local government (as we constantly insist) fails because the authorities are, as a rule, dominated by inferior men. The resulting evils (as we also so often urge) can be cured only by the development of local patriotism with consequent improvement in the personal qualities of councillors. Failing this, the only remedy lies in increasing the coercive powers of the Local Government Board, a measure which, in the presence of developing democracy, seems far outside the scope of present-day practical politics.

#### Co-Education.

CO-EDUCATION, the education of boys and girls together, has made considerable progress during

the past twenty years. During this time schools for boarders up to the age of nineteen have been established on English public school lines, and their founders now claim that there has been left no room for doubt as to the success of the experiment. It is alleged by the advocates of co-education that our public schools have been handicapped by the unnatural conditions caused by separation of boys and girls, which tend to produce and foster vice, and that if the unnatural conditions are taken away the school system has the power both to make the pupils good and keep them so. In a paper in the *Parents' Review* the Rev. Cecil Grant, of Harpenden, argues strongly in support of this view. Speaking after an experience of ten years, he says that co-education has no disadvantages at any age; it would be as reasonable to speak of the disadvantages of having both boys and girls in a family. Its advantages begin with the earliest school years, and are greatest during adolescence, and the succeeding years. It is argued that in a school for boys alone or girls alone risk of immorality cannot be avoided by any means, since separate education defies Nature, and renders it impossible to teach "sex reverence." Co-education, we are told, gives immunity from impure conversation; it has resulted in a wonderful improvement in manners, and an absence of the gloom which mostly pervades all monastic institutions. Association with their brothers and their brothers' friends has rendered girls less self-conscious, and given them wider interests. Association with the opposite sex has taught the boys on the other hand to be more painstaking, and has deprived them of the tendency towards vindictiveness and cruelty, which is sometimes marked in the monastically-educated boy, while they have gained in manliness and chivalry. There has been no tendency either of girls to become tom-boys, or of boys to become effeminate. Mr. Grant makes the strong assertion that if a wise system of co-education were universal, sexual immorality among young or grown up people would become extinct, while natural differences and the healthy instincts of sex would remain.

#### School Clinics.

In a leader in these pages last Wednesday the practicability of school clinics was discussed. Simultaneously with its publication there appeared in the newspapers the Report of the London County Council with regard to the negotiations which the Education Committee had been conducting with London hospitals with reference to the treatment of children. The Committee recommend as an experiment for a year that arrangements be entered into with a number of general and special hospitals, which will secure treatment of 10,000 children in respect of eye, ear, and skin ailments. This will involve an expenditure of £4,000 a year, and still leave 5,000 children not provided for. What would be the cost of providing treatment for the large classes of defects

and diseases besides those named is not specified, and the present limited scheme would need the approval of the Board of Education. Under the Education Act of 1909 the local education authority may call upon parents to pay a part or the whole cost of medical treatment, and may when necessary recover the amount summarily as a civil debt. It seems, however, a little doubtful whether the charge on the rates would be materially diminished from this source, and it remains to be seen how this suggested new impost is likely to be viewed by the public, who will be called upon to pay the bill.

#### The Health of Dublin.

IN another column we notice a letter on the health of Dublin addressed by the Medical Officer of Health to the Lord Mayor. We confess we do not quite understand why the matters dealt with might not have been included in Sir Charles Cameron's Annual Report presented a few months ago, but if it is the hope of Sir Charles by a special letter to call attention more emphatically to the evils in question, we heartily commend his intention. The evils mentioned are, indeed, well known to every one interested in the condition of the City, but they cannot be too often impressed on the mind of the public. We fear, however, that by suggesting impracticable remedies, Sir Charles Cameron weakens his case. Dwellings for the poor are very necessary, but it is absurd to suppose that in the present state of ruinous taxation the ratepayer will willingly saddle himself with another sixpence in the pound. Again, in the present state of Parliamentary business, it is impracticable to bring in a highly contentious Bill to confer additional powers on the Corporation. Some of the measures suggested by Sir Charles Cameron, such as the cleansing of lanes and courts, are already in the power of the Corporation, and by concentrating his activity in such directions Sir Charles would probably do more good than by demanding unattainable powers. The fact is, as Sir Charles Cameron shows, that the Corporation has more ample powers than it ever exercises. Until it evinces some desire to exercise these powers for the common good, the public will regard with suspicion any attempt to gain new powers.

#### Sanitation—General and Special.

IT is somewhat painful when the public mind cannot grasp the fact that, while general hygienic efforts may have had a beneficial effect in preventing a disease, say, small-pox, there may be still some value in special sanitary measures. Unfortunate as this may be with laymen, it amounts to a positive misfortune when medical men fall into the same error, and seek to belittle special work, attributing every lessening of disease to general measures, especially as, after all, general preventive measures are a collection of what were once special measures in their own particular spheres. A recent number of a well-known review has lent its columns to the discussion of the relative value of general hygiene, and the special

prevention of Malta fever by avoiding local goat's milk. Be the merits or demerits of the various contentions what they may, it is to be regretted that the public mind should be assisted by a doctor of medicine to doubt honest medical endeavour. In the case in point, however, the weight of evidence in favour of there being efficacy in the special measures, namely, the elimination of goat's milk, is overwhelming; at the same time there is little doubt that general hygienic procedure in Malta, as elsewhere, adds its quota to the final result.

### The Kingston Medical Officer of Health.

IN these columns, on October 20th, was described the hard case of Dr. Collins, the Kingston Medical Officer of Health, whose salary the Town Council, without assigning any reason, was proposing to reduce by the sum of £35 a year. A movement was on foot to promote a testimonial to Dr. Collins to show the appreciation of his services by the public during the sixteen years' tenure of his office. A memorial signed by all the medical men in the district was sent to the Council expressing their high appreciation of Dr. Collins's services to the borough, and their hope that his salary would be restored to the former amount of £500. The Council, however, declined to receive the memorial, an act which we are told is much resented in the town. The Local Government Board has now asked the Council to reconsider its action in reducing the salary. This action the Board takes as an expression of the Council's displeasure at the independent character of Dr. Collins's reports, whilst pointing out that their policy for some time past all over the county has been to induce all authorities to pay a minimum of £500 a year to whole-time medical officers. The Town Council has met this request by deleting from the terms of Dr. Collins's appointment the reference to his giving his whole time to the work of his office, although aware that during the sixteen years he has held it he has not taken private practice. It is to be hoped that the Local Government Board will not be satisfied with this; but it must be borne in mind that they possess no power to coerce a recalcitrant authority or to prevent them from venting their spleen in a variety of other ways upon an old faithful servant trying conscientiously to carry out his duty towards the public. It is impossible to add any novel comment to this fresh example of a very common state of things. That such occurrences should continue possible is the fault of the public. They can if they choose turn out from the authorities inferior men and replace them by others not capable of sacrificing the welfare of the people to gratify their own petty personal feelings, or to serve the sordid ends of themselves and their friends. If the burgesses of Kingston can rouse themselves and develop the spirit of local patriotism, they may put an end to the present scandal, do justice to Dr. Collins, and set a much-needed example to the country. The country sadly needs teaching that unless the bulk of respectable and capable citizens will display adequate practical interest in local affairs, unless they will either undertake to serve on local bodies or take part in electing fit candi-

dates, local legislation of any kind cannot be properly administered, our democratic institutions which are putting more and more power into the hands of local bodies will fail, and the failure will involve damage, if not disaster, to the whole nation and to the Empire.

## PERSONAL.

HIS MAJESTY THE KING opened the Jubilee Extension buildings of the National Hospital for the Paralysed and Epileptic on the 4th inst. The Queen was unable to accompany the King, but sent chocolates for the little children patients.

DR. JAMESON left by the Union Castle liner *Saxon* for the Cape on the 6th inst.

MR. GEORGE H. POOLEY, B.A., F.R.C.S.Eng., F.R.C.S.Ed., has been appointed to the Lectureship in Ophthalmology at the University of Sheffield.

THE Local Government Board has asked the Kingston Town Council to reconsider its action in reducing the salary of the M.O.H. (Dr. H. Beale Collins).

MISS HALDANE, the sister of the Secretary for War, presented badges to the members of the Territorial Force Nursing Service for Yorkshire, on the 4th inst.

MR. GEORGE WILKINSON, B.A., M.B., F.R.C.S., has been appointed to the newly instituted Lectureship in Diseases of the Ear, Nose and Throat at the University of Sheffield.

DR. A. NEWSHOLME has been elected a member of the Executive Committee of the Imperial Cancer Research Fund, in the place of Dr. P. H. Pye-Smith, resigned.

DR. J. W. W. STEVENS, Walter Myers Lecturer in the Liverpool School of Tropical Medicine, has left for Alexandria to undertake an important inquiry into helminthology in Egypt on behalf of the School.

MR. HEDLEY HILL, M.D.Durb., L.R.C.P.Lond., M.R.C.S.Eng., has been appointed the Honorary Representative of the Royal Humane Society in Bristol. Dr. Hill received the Stanhope gold medal for the best rescue in 1887.

THE treasurers of the Middlesex Hospital Cancer Charity have received from Mr. and Mrs. Richard R. Hollins a further donation of £100 for the maintenance of the Richard Hollins Scholarship attached to the Cancer Research Laboratories.

AT the recent Annual Dinner of the Balneological and Climatological Society, under the Presidency of Dr. Leonard Williams, a presentation was made to Dr. Septimus Sunderland, in recognition of his long and valuable services to the Society.

MR. C. K. C. HERAPATH will preside at the annual Medical School Dinner of the University of Bristol, which will take place at the Royal Hotel, Bristol, on Tuesday, November 23rd, 1909. Sir Isambard Owen, D.C.L., M.D., Vice-Chancellor, will be the guest of the evening.

DR. CASSELLS, whose duty it was to assist at the tube-feeding of some suffragettes, had his house at Handsworth visited during the early hours of Thursday morning last, with the result that bills of the Women's Social and Political Union were pasted on the dining-room window, and lumps of coal left on the doorstep.



# A CLINICAL LECTURE

ON

## SUPPURATION IN THE ACCESSORY NASAL SINUSES. (a)

By JAMES DONELAN, M.Ch., M.B.,

Chevalier of the Crown of Italy; Laryngologist to the Italian Hospital, London.

### PART II.

In *acute attacks* it takes two chief forms:—

(1) Neuralgic pains. (2) Constant headache more or less distinctly associated with the region of the affected sinus.

(1) The neuralgic pains are not always present, but occur only at certain hours, usually towards midday, attain their acme in one or two hours, and gradually pass off. The patient is usually free from them during the night and the greater part of the day. Hajek points out that since these pains are relieved by antipyrin and phenacetin, many practitioners regard them where occurring in the course of influenza as due to an influenzal trigeminal neuritis, an opinion which he regards as absolutely untenable. On the other hand, *sic douloureux* is not usually associated with acute sinus inflammation.

(2) The other class of pains are associated with the sinus limits. These are usually constant pains in the walls of the affected sinus. They very often occur in acute empyema instead of the neuralgic pains if the case is getting worse, or especially if marked retention occurs, or if the inflammation attacks the bony wall.

(b) Headache in *chronic sinusitis* has usually a diffuse, indefinite character. Most frequently it is frontal, dull, and associated with a feeling of heaviness. Pains in the vertex and occipital pains are by no means rare. It is very rare to have face-ache with chronic maxillary empyema. On the whole, the diffuse headache of chronic sinusitis shows the greatest irregularity. It may be present in a slight case, and completely absent in long-standing cases with the most fetid secretion. In chronic ethmoidal and maxillary empyema it may be absent through the whole course of the disease. It is, however, more frequent in frontal and sphenoidal disease. One has to be on one's guard against attempting to localise the affected sinus from the subjective sensations of the patient. There is no definitely ascertained constant relation between the headache and the pathological condition that would warrant one doing so. Especially is this to be borne in mind with regard to frontal headache, as the normal frontal sinus has been opened several times in error as the result of following subjective indications too exclusively.

During exacerbations of chronic empyemata the headache usually takes on something of the neuralgic character mentioned in regard to acute empyemata. The connection of hemicrania with sinus suppuration is uncertain. It is, however, often relieved by the effectual treatment of the empyema, but is so far not known to have disappeared altogether.

(2) Secretion. The most constant and striking sign of a sinus inflammation is the occurrence of abnormal mucus, muco-pus, or pure pus. The quantity varies greatly according to the stage and intensity of the affection. It is usually most copious in the acute stage or during exacerbations. Patients have been known to use 30 or more handkerchiefs a day. A great part of it, however, passes into the pharynx, and is swallowed or hawked up.

In acute conditions it is usually more fluid, while in chronic it tends to form lumps or crusts. There are, however, many exceptions to this. Sometimes the pus forms ill-smelling, cheesy masses, due to fatty degeneration of the pus cells. This caseous degeneration occurs most commonly in the pus from the maxillary sinus, less frequently in the frontal, while only a

few rare cases have been reported in connection with the sphenoidal. There is usually only a slight purulent odour. The pus from the maxillary sinus is always fetid in empyema due to carious teeth or to breaking down of a tumour. Pus from the ethmoidal cells and the sphenoidal sinus has the greatest tendency to form evil-smelling crusts giving rise to the symptom of ozæna, otherwise to the condition so often described as fetid atrophic rhinitis. While fetid crusts are highly significant of ethmoidal or sphenoidal disease, it should be borne in mind that fetid crust formation may occasionally result from maxillary and frontal empyemata.

(3) Disturbances of smell. As a rule, the olfactory sense of the patient is weakened in consequence of changes in the olfactory membrane. This is especially the case in disease of the sphenoidal and ethmoidal cells. Even in an early stage, and before any serious change in the perceptive mechanism has been induced, the pus is deposited in scales, the membrane being covered, so to speak, with an impermeable varnish which prevents access of odoriferous particles. Perception is usually recovered even in very long-standing cases on draining the empyema. There are, however, many instances in which, owing to advanced degeneration of the olfactory membrane, this does not take place. Subjective cacosmia: The perception from time to time of an evil odour without external cause is very significant of sinus trouble, especially in the maxillary and sphenoidal sinus.

Gustatory anæmia or loss of taste is also a partial consequence of loss of smell.

(4) *Changes from secondary disease of the upper respiratory tract.*—The chief is interference with nasal respiration through irritation products induced by the pus, such as degeneration of mucous membranes, hypertrophies of all kinds, including polypi. Several cases of maxillary empyema have been recorded, in which, as during exacerbations, when the sinus was gorged with pus, the middle turbinal swelled up so as to block the upper part of the nasal passage. This was, of course, due to the intimate vascular connection between antrum and turbinal. Of true hypertrophies I have myself seen a somewhat remarkable example, of which the details will be given elsewhere. The patient suffered from severe and frequent epistaxis, a large, sharp, thorn-shaped spur had grown out from the septum, apparently as the result of continued flow of pus from the middle meatus. The point was impacted in the posterior part of the inferior turbinal, causing a pressure ulcer from which the bleeding took place. The spur was removed, a maxillary empyema of long standing was located and drained, and a good recovery took place.

Repeated attacks of follicular tonsillitis may be occasioned by pus from the nasal sinuses entering the crypts of the tonsils.

Time does not permit me to mention more than the reflex asthmas (whether polypi are present or not), the catarrhal affections of the pharynx, larynx, and lower respiratory tract. Very often these diseases have become chronic long before the primary cause is discovered in an old sinus empyema.

(5) *Digestive Troubles.*—An evil taste in the mouth is often noticed in the mornings from pus flowing into the pharynx during the night. Repeated attacks of vomiting may result from the increased irritability of the pharynx, and may cause various forms of dyspepsia. Cases have been reported by Kuhnt and others. Quite recently a case of defective secretion of

(a) Delivered at the Medical Graduates' College and Polytechnic, London, Oct. 5th, 1909.

hydrochloric acid has been reported by Scherer, in which a return to a normal condition of the gastric fluid followed evacuation of a maxillary abscess.

(b) General symptoms: The general symptoms include these phenomena which cannot be directly attributed to the sinus disease or the secretion, but are rather the expression of a reaction of the whole organism. They are:—(1) Fever; (2) congestion; (3) depression. (1) Fever in the inflammatory sinus affections is usually indistinguishable from that of the exciting cause—*influenza*, *diphtheria*, etc. In chronic empyema it is generally absent. When it occurs it is usually a sign that the disease process has attacked some neighbouring structure or organ, and is often a warning of the onset of grave complications, orbital or cerebral.

(2) The congestive symptoms show themselves as general vascular excitement, increased frequency of pulse, injection of conjunctivæ, *muscæ volitantes*, intolerance of alcohol and tobacco, irritability and moroseness of temper.

(3) Amongst the depression symptoms that have been observed in definite association with sinus trouble, and which have been relieved by successful treatment of the empyema, are: slow pulse, probably from reflex vagus irritation; this has also been observed to take place in forcible douching of the maxillary antrum; loss of inclination to work; sense of early fatigue; indolence. These last, of course, have significance only in the case of patients of previously active habits. The inability to work is often the result of inability to sleep. The depression is always more marked if there be headache, and this is, as we have seen, more common with frontal empyema.

The mental activity of such patients diminishes, and there are often somnolence, indolence, and hypochondria.

The occurrence of sinus empyema in the young hinders mental development, while in adults melancholia has been observed to supervene frequently in persons afflicted with *ozæna*. I saw myself some years ago a suicidal melancholic whose *ozænic* and mental symptoms dated from an attack of *influenza*, but who has remained well since his frontal and ethmoidal sinuses were adequately drained.

Symptoms from complications omitted: I have entered at more fully into the local and general subjective symptoms than, perhaps, their value as aids to diagnosis would have warranted. It must be admitted that they only serve to awaken a suspicion that sinus trouble may exist, and in so far they are useful. It is only very rarely indeed that one can say that there is inflammation or suppuration of any individual sinus merely from the patient's account of what he feels. The recognition of the relation of these symptoms to sinusitis may, however, serve to direct attention to the influence on the entire organism of what in plain terms we may call "an abscess in the head," and may make us pause in our selection from the various paths to which they may misleadingly point. It should, at any rate, be borne in mind that these symptoms may very often be evidence of a common trouble like sinusitis, rather than of the rarer affections with which they are sometimes also associated, and that no diagnosis should be made until a thorough examination of the nasal cavities has taken place.

**Diagnosis.**—The diagnosis of sinus suppuration can then be made with certainty only as the result of a painstaking rhinoscopy. I have already alluded to the doubtful assistance rendered by transillumination, and the same may be said of skiagraphs. We will now proceed to make the diagnosis by intra-nasal examination alone, without the aid of symptoms of any kind. In a given case of, say, unilateral purulent nasal secretion, the problem is to find the source of the pus. It may not come from a sinus at all, but may be the result of irritation and retention caused by a foreign body, a rhinolith, or a syphilitic sequestrum. The pus may all go down the pharynx, as in my case of septal spur and epistaxis, owing to occlusion of the anterior part of the middle meatus. The first step is to remove all visible pus either with a douche or tampons. If there are crusts these are better not removed with a

douche at first, but by forceps, as on gently detaching them a stream of pus may issue from a point close to the source, and serve as an indication. If there be no foreign body or similar cause of intra-nasal supuration, the pus probably comes from a sinus. Having thoroughly cleansed all the nasal passages, the recurrence of the pus should be looked for first in the middle meatus as more likely, and next in the olfactory fissure. In other words, we must note on which side of the middle turbinal it reappears.

The pus may come from a sinus or from a lesion of the mucous membrane. The rapidity with which the pus recurs helps us here, though it tells us nothing as to which or how many sinuses may be affected. If it recurs very slowly and in small quantity, there is probably only a lesion of the mucous membrane, but if it wells out after some seconds or even minutes, it is strong evidence that it has been pent in some sinus, as in a reservoir. It may then be taken as a general rule that the rapid recurrence of pus in the olfactory fissure or middle meatus, after thorough cleansing, is reliable evidence that it must come from one or more of the sinuses. To this there are some exceptions, as, for instance, when the sinus secretion is unusually small; also it is obvious that in the case of closed empyemata no secretion can take place. We have next to consider whether the pus comes from one or more sinuses, and which of them. We may divide the sinuses not only with reference to their own position, but especially to that of their outlets into two sets. The first, the anterior set, includes the frontal and maxillary sinuses, and the anterior ethmoidal cells. The outlets of these are all hidden outside the anterior end of the middle turbinal in or in the immediate vicinity of the hiatus semilunaris.

The posterior set includes the posterior ethmoidal cells and the sphenoidal sinus opening into the superior meatus. It is obvious that pus from the anterior set must follow a very different course from that flowing from the posterior. With reference to the middle turbinal, pus from the anterior set appears outside it in the middle meatus, while that from the posterior set is seen between the middle turbinal and the septum in the olfactory fissure. Suppose we have so far shown that there is suppuration of one of the anterior sinuses, we have next to decide which of them. Now the maxillary is the most frequently affected of the anterior set, so we begin by excluding that. As the normal ostium is placed in the highest part of the cavity when the head is erect, we bend the head down between the knees with the suspected side upwards. If pus reappears in the middle meatus during this manœuvre, it must come from the maxillary antrum. If it is from the frontal or ethmoidal cells, it will reappear only in the erect position. The absence of pus after bending down does not prove, however, there is none in the antrum. The next step is to try and find a possible accessory ostium in the middle meatus, and to wash out the cavity by means of a bent cannula. If there is no such opening, a further attempt should be made to wash out through the normal ostium in the hiatus. If in either case the fluid returns mingled with pus, we have either a maxillary empyæma or a condition of pyosinus. If all these methods fail, our next step is to make an artificial opening. Until quite recently, puncture through the alveolar process was the usual method, either through a vacant alveolus or through a vacancy which it was felt necessary to create in the interests of the patient. As a method of diagnosis it was objectionable on the ground that it exposed a possibly healthy sinus to the risk of infection from the mouth, while as a means of treatment it is on similar grounds being rapidly superseded by modern intra-nasal methods. Personally I find that puncture through the inferior meatus as low down as the bony wall will easily allow, or through the middle meatus just above the attachment of the inferior turbinal, if the patient be kept in a recumbent position during this part of the examination, will enable one to aspirate any pus that may be in the cavity with a suitably curved cannula. The puncture should be made at a point corresponding to the second molar, or the space between it and the third. If after this pus appears in the middle meatus in the erect

position, it must come from the frontal sinus or the anterior ethmoidal cells.

The frontal being the easier of access, we next proceed to examine that.

Test puncture being here impossible we have to rely chiefly on the probe, as the douche cannula cannot always be used. At this stage of the examination, which may occupy several sittings spread over sometimes two or three weeks, it is usually necessary to remove the anterior half of the middle turbinal. Even then the hiatus may not be accessible on account of hypertrophies and polypi, all of which may have to be cleared before further progress can be made.

Supposing that we have at last got a probe into the infundibulum. If it is only a thin one it is useless to think of using the cannula to wash out pus from the sinus. We should use as large a probe as will go into the passage easily, introduce it slowly and draw it back rapidly, but not out, a few times so as to make it act as a piston. This and the *vis a tergo* will help to make the pus well up around the instrument if any is present. If it has not been found in this way, and if it has not been necessary to remove the anterior end of the turbinal, and pus now again appears in the middle meatus, it can only come from the anterior ethmoidal cells. The removal of the anterior part of the turbinal and direct probing of the ostia is of course the more reliable method, and should always be followed in doubtful cases.

In going over this method of differential diagnosis I have endeavoured to keep before us that pus found in the maxillary sinus need not be secreted in that cavity. We may have the condition known as pyosinus. Here our method fails, for we have as yet no certain means of diagnosing this condition except from the results of treatment of the frontal or ethmoidal cells. If after clearing the hiatus and draining the upper cavities pus is still found in the antrum, it is in all likelihood secreted there. If, on the other hand, it is no longer present, the previous condition has been one of pyosinus.

We finally take suppuration in the olfactory fissure. This may, as in the instances already mentioned, be due to mere recent catarrh, syphilis of bone, or a foreign body. Having excluded these and decided the pus must come from the sphenoidal or posterior ethmoidal cells further progress is conditioned by the width of the fissure. If the fissure is wide and not obstructed in any part by the middle turbinal or a deflection of the upper part of the septum it is possible in a great many cases to see the sphenoidal ostium. In such cases the diagnosis offers little difficulty. The secretion lies either in the naso-pharynx or the posterior part of the nose. When the pus and the crusts that have usually accumulated have been removed it should be possible to see that pus is in or issuing from the sphenoidal sinus of the side under examination.

The probe can be passed easily into the ostium and can usually be advanced until the distance from the inferior nasal spine is about 7 cm., usually between 8 and 9. In some cases when the sinus extends into the basilar process the distance may be as much as 10½ cm. As in the case of the maxillary sinus, we have to bear in mind that the sphenoidal may also act as a reservoir for pus from a higher placed cavity. We have therefore only proved that there is pus in the sinus. Leaving that question for later decision, we proceed as in the anterior sinuses to thoroughly cleanse the sphenoidal sinus and the olfactory fissure and see whether the pus reappears quickly and where. Pus now reappearing must come from the posterior ethmoidal cells. It is a good plan, also recommended by Hajek, to do as I suggested for the examination of the maxillary sinus, and place the patient lying down or with his head well bent back, as in this way the flow from the ethmoid is hastened and will often be seen not only in the fissure, but also running down over the anterior sphenoidal wall. We have now gained the knowledge that suppuration is taking place in the ethmoidal cells, and that there is pus in the sphenoidal. Suppuration may be going on in both, however, or the sphenoidal may be only filled with pus from the ethmoid.

In order to decide this we must temporarily separate them by plugging the sphenoidal ostium either as it stands or after enlargement by Hajek's hook or other suitable curette. If the ostium lies so far out in the sphenoidal recess as to be probed with difficulty, the recess itself should be plugged. The tampon should be left in place for from 12 to 24 hours. Pus from the ethmoid will now cover the anterior aspect of the tampon, while that secreted in the sphenoidal will be received posteriorly. Moreover, on removal of the tampon the pus from the sphenoid will well out quickly. It may be necessary to repeat this process two or three times before coming to a definite decision. Another advantage of this method is that it enables us not only to see whether one or both sinuses is affected, but also to settle the question of pyosinus. It has been suggested that pyosinus of the posterior ethmoidal cells from the sphenoidal may take place, but Hajek, who is the greatest living authority on these matters, has never seen a case, though he does not deny its possibility. Though the sphenoidal sinus may and is often the site of independent empyema, this is not the case with the posterior ethmoidal cells when they suppurate there is usually simultaneous, or shortly following, suppuration of the sphenoidal sinus or sinuses.

Only one point remains for consideration, and that is the procedure in cases where the olfactory fissure is so narrow as to afford no view of the sphenoidal ostium. Here we proceed in a manner analogous to that employed with the anterior sinuses, and remove the posterior part of the middle turbinal with scissors and snare. If the anterior part or lower border still obstructs the view, these must also be suitably shortened. Needless to say, all polypi must be removed from the superior meatus, and if necessary a deflected septum must be corrected. It should be noted here that it is often possible to wash out the sphenoidal sinus even when it cannot be seen on account of a narrow olfactory fissure. The weight of experience is, however, against this as a means of arriving at an accurate diagnosis, and as successful treatment of suppuration in the posterior sinuses will need as full a view of the seat of the trouble as possible there is no valid reason why the removal of the necessary amount of middle turbinal should not be carried out to settle the differential diagnoses. Having gained access to the space in this way, the diagnosis between the two possible sources of the pus is made as described in connection with the wide olfactory fissure.

In this rapid survey of the general features of sinus suppuration, many points that will at once suggest themselves by their absence will occur to every one. It would not have been possible, I think, to bring them in, even if time allowed, without trenching on the subject matter of others, who will doubtless discuss the individual sinus diseases and their treatment in due course.

NOTE.—A Clinical Lecture by a well-known teacher appears in each number of this journal. The lecture for next week will be by Robert J. Rowlette, M.D., Pathologist to Dr. Stevens' Hospital, and to the Rotunda Hospital, Dublin. Subject: "Vaccine Treatment in General Practice."

## BRADSHAW LECTURE.

### DARWINISM AND MEDICINE. (a)

By JAMES ALEXANDER LINDSAY, M.A., M.D.,  
F.R.C.P.,

Professor of Medicine in the Queen's University of Belfast, Physician to the Royal Victoria Hospital, Belfast.

MR. PRESIDENT,—I trust I may with some propriety, in this year of the Darwin centenary, ask you to consider with me the significance of Darwin's great discovery for medical thought and practice. The subject is large, and can on this occasion be dealt with only in outline. The field which I shall ask you

(a) Delivered at the Royal College of Physicians, London, on November 2nd, 1909.

to traverse is a well-trodden one, but I believe its fruitfulness is not yet exhausted. Darwin's work on "The Origin of Species" contained, as Helmholtz said, "an essentially new creative thought," a thought, I venture to add, which is still fertile, still seminal, still full of suggestion and guidance for all whose labours lie in the field of biology.

The relation of the science and art of medicine to the higher thought of the day must always be a matter of interest and importance. Medicine is coloured by that thought; its postulates, prepossessions, and theories are modified by it; in its degree it contributes to that thought. When we get from the facts of science to the truths of science, to emphasise a pregnant distinction, our thinking is modified stimulated or deflected to an important extent by the intellectual atmosphere in which we live. A notable instance in point is afforded by the Father of Medicine—Hippocrates. In the Homeric poems everything is miraculous. The storm, the sunshine, shipwreck, plague, blight, sickness, victory, defeat—everything is due to the direct interposition of supernatural powers. "Every event," as the late James Adam said, "is a theophany." The conception of natural law has not yet arisen. How different is the atmosphere of the works of Hippocrates. Here, amidst much that is crude and empirical, there is a genuine recognition that in the field of disease events follow a natural sequence, that effects are proportionate to causes, that order reigns, and that our business is to investigate that order. Between Homer and Hippocrates had intervened the great school of the Ionian physicists, from Thales to Democritus, physical science had seen its dim and feeble dawn, the lineal succession was opened which was one day to include the names of Galileo and Copernicus, of Liebnitz and Newton, of Darwin and Wallace. The comparative failure of the successors of Galen to advance the art of medicine, and the barrenness of our art during the many hundred years during which their influence reigned supreme, were due in large measure to the false philosophy which lay at the root of the Galenic system, to the predominance of metaphysical theory over observation and experiment. The rapid advance of medical science in modern times has coincided with the progress of physical and biological science in general, in part because science furnishes medicine with instruments of precision and methods of research, but perhaps even more because it creates the atmosphere in which medicine can flourish and develop. The reaction of one branch of science upon another branch at the present day is both potent and prompt.

I need not inform you that the conception of evolution existed long before Darwin, and goes back to the very dawn of science. It is said to occur in the sacred books of the Vedas. It was the central thought of the philosophy of Heraclitus. It is found in the works of Aristotle, and we can trace it through a long succession of thinkers, including Bacon, Descartes, Leibnitz, Hume, Kant, Goethe, Buffon, Geoffrey St. Hilaire, Erasmus Darwin, and Lamarck. It is interesting to note that one of the most notable precursors of Darwin was a member of our own profession, Dr. James Cowles Prichard, of Bristol. Writing in the year 1826 Prichard clearly recognised the existence of organic evolution, he fully apprehended that domesticated races of animals and plants have been produced by selection by man, and not by the influence of environment; he recognised the operation of Natural Selection, though he misinterpreted its range and importance; and, most curious of all, he recognised the difference between acquired and congenital characters, and argued for the transmissibility of the latter and the non-transmissibility of the former—a view reached independently half-a-century later by Weismann, and now usually associated with his name. Darwin did not discover Evolution. He discovered its leading law, and by a long series of observations, experiments, and reflections, unparalleled in the history of science, he converted the brilliant guesses of earlier inquirers into an assured truth and an established principle. "We claim for Darwin," says Alfred Russel Wallace, "that he is the Newton of natural history, and that, just as surely as that the discovery and demonstration

by Newton of the law of gravitation established order in place of chaos and laid a sure foundation for all future study of the starry heavens, so surely has Darwin, by his discovery of the law of Natural Selection and his demonstration of the great principle of the preservation of useful variations in the struggle for life, not only thrown a flood of light on the process of development of the whole organic world, but also established a firm foundation for all future study of Nature." The conception that the organic world is the scene of an incessant struggle, of a keen vital competition, in which the fittest survive, *i.e.*, the fittest for their environment in the capacity to obtain food, resist their enemies, and propagate their kind, while the unfit perish, has been recognised as the fundamental law of life, and the demonstration of this principle we owe to Darwin and to Wallace. As Weismann says, this principle "has become the basis of the science of life," it "has conquered the world," and has become so inwrought in the texture of our thought that it is now practically impossible to think of any biological problem except in terms of evolution. That any of the fundamental features of the Darwinian doctrine have been subverted by fifty years of inquiry and controversy is not, to my mind, a tenable proposition. It is true that some of the subordinate features of that doctrine remain open questions—how far, for example, use and disuse have operated in producing organic changes, what weight is to be assigned to the influence of the environment—a point upon which careful readers of the works of Darwin will see that his mind wavered from time to time—what is the precise significance and area of operation of sexual selection, whether acquired characters are inherited or not, how far the Mutationism of De Vries and others operates instead of slow and almost imperceptible change. On these points finality has not yet been attained, but their solution—whatever it may be—will not invalidate the Darwinian doctrine. The general tendency of inquiry since Darwin's time has been, upon the whole, to strengthen the claim of Natural Selection to be regarded as the great law of organic life, to show how wide its range, how subtle its operations, and to minimise the importance of other factors. To take an example—at first sight nothing can be more obvious than to attribute to the effect of disuse the loss of sight by fish, crabs and rats inhabiting the dark caves of Kentucky and Carniola. But another view is at least tenable. When, owing to the absence of light, the faculty of sight ceased to be of utility to these creatures, Natural Selection, of which the function is to keep every organ which is of use to any creature up to the mark, ceased to operate, and it is a fundamental law that any organ withdrawn from the conservative action of Natural Selection tends to degenerate. The controversy especially associated with the name of Weismann, whether acquired characters are inherited or not, is one of vast and far-reaching importance for practitioners of medicine. Weismann, as you are aware, holds that in all organisms there are two kinds of plasm, the somatic and the germinal; that the permanent germ plasm passes unchanged through a series of generations, and is not affected, or but little affected, by environmental influences, which affect the somatic plasm; that modifications produced upon the somatic plasm by the environment and by use or disuse are practically limited to the individual and not transmitted to the offspring, and that hence no characters except those predetermined in the germ are available for evolution. This question is too large to be discussed at any length on this occasion. Medical opinion has been to a large extent opposed to the views of Weismann, but it must be admitted that he has succeeded in throwing great doubt on the transmissibility of acquired characters, a doctrine which Darwin assumed as too obvious to require demonstration. Most of the supposed cases of such transmission are apparent rather than real. Syphilis seems a crucial case in point, hereditary syphilis being one of the most familiar of phenomena. But it is now practically certain that this is not a case of inheritance at all, in the strict sense of the term, the true explanation of

the facts being an ante-natal infection of the ovum, usually from the maternal side. Whether tuberculosis is ever directly conveyed from parent to child is still doubtful, but if such transmission were proved the most probable explanation would be the direct inoculation of the embryo, and not inheritance. To disprove Weismann's doctrine we should require to show that mutilations or the results of training, exercise or education, or acquired diseases, re-appeared in the offspring as the result of heredity. This has not been hitherto conclusively shown. The problem is one which has great interest for us, and medical observers might contribute to its solution. May I suggest a case in point where evidence from the side of medicine might be available? In a certain proportion of cases neurasthenia is brought on by over-study, anxiety, overwork, want of sleep, excess of some kind, in persons where no congenital tendency to nervous disease can be suspected. Is such neurasthenia transmitted either as neurasthenia or some allied condition? The question is worthy of attention, and an answer ought to be possible.

Darwin as a scientific worker presents us with a model good for all time, and worthy of admiration and imitation. "My success as a man of science, whatever this may have amounted to," he tells us, "has been determined by complex and diversified mental qualities and conditions. Of these the most important have been a love of science, unbounded patience in long reflecting over any subject, industry in observing and collecting facts, and a fair share of invention and common sense." In another place he says:—"Whatever I have done in science has solely been by long pondering, patience, and industry." This is altogether too modest an estimate. Darwin, in point of fact, possessed in a supreme degree two faculties rarely present in perfection in the same individual—viz., immense industry and accuracy in the accumulation of facts, and a daring originality of speculation, coupled with much caution in drawing any final conclusions. He had the power of keeping any subject more or less before him for a great many years. He was an indomitable theoriser, and held that "without speculation there is no good and original observation." Again he says:—"I cannot resist forming a hypothesis upon every subject." The essential fairness and integrity of his mind is shown by the following passage:—"I had also during many years followed a golden rule, namely, that whenever a published fact, a new observation or thought came across me which was opposed to my general results, to make a memorandum of it without fail and at once, for I have found by experience that such facts and thoughts were far more apt to escape from the memory than favourable ones."

May I suggest that in much of the above there is a wholesome lesson for ourselves? That we should be diligent, patient, and thorough in the collection of facts goes without saying. That we should keep those facts for long periods, even for years, before our minds, before drawing, still less publishing, our conclusions, will seem a hard saying to the contributors to periodical medical literature. Perhaps, indeed, such a rule is a counsel of perfection, hardly possible to the average man. But I would ask you to note the high place assigned by Darwin to theorising and speculation in scientific work. This may seem a dangerous doctrine, but I am convinced that it is a sound one. Medical science is to-day overweighted by the accumulation of a vast array of more or less crude and isolated facts. What we need is the illuminating generalisation, the daring hypothesis, to co-ordinate facts hitherto out of relation with each other, to give perchance to science a new *organon*, to light the way to fresh fields of inquiry and discovery. It is the presence of this element of underlying theory or law which lends so much attractiveness to the work of Pasteur and Lister, of Koch and Metchnikoff, of Ehrlich and Wright. The bold hypothesis lights up the dark ways of Nature, illumines the road already traversed, sheds light on the pathway which lies ahead.

Before proceeding, after the foregoing more or less preliminary observations, to apply the principles of

Darwinism to man in health and in disease, I may be permitted to remind you of the fundamental Laws of Growth which must guide us in our inquiries. These laws might be stated as follows:—

- (a) The Law of the Perpetuation of Species or of the Unity of Type.
- (b) The Law of Variation.
- (c) The Law of Reversion.
- (d) The Law of Atavism.
- (e) The Law of Correlation, whereby when one organ varies other organs tend to vary also.
- (f) The Law of Compensation or Economy, whereby increase of growth of one organ is accompanied by diminution in growth of another organ.
- (g) The Law of Sexual Selection.

We might summarise the foregoing laws as follows:—The general tendency in all living organisms is that the child shall resemble the parent in specific characters—i.e., that the unity of type shall be preserved. But variation from type is always present to a greater or less degree. Darwin thought that variation was largely due to changed conditions of life. Weismann believes that sexual reproduction is the chief cause of variation in the higher animals, including man, and Wallace shares this view. Variation is accompanied by a tendency to revert to type. Hence, notable departures from type tend to die out, but to this law there are many curious exceptions—e.g., the Ancon sheep, and the numerous "sports" amongst plants which have given rise to permanent new varieties. Atavism is the law whereby the child sometimes resembles the grand-parent or the great-grand-parent more than the parent. It may be regarded as a special case of reversion. By the law of correlation we mean that principle whereby when one organ varies another organ varies, the two organs not always being related in function. Thus, white cats with blue eyes are always deaf. In certain breeds of cattle, colour and susceptibility to the attacks of flies are correlated. By the law of compensation, or economy, we mean that principle whereby nutriment required by the overgrowth of one organ is withdrawn from another organ. It is probably in consequence of this law that the highly specialised reactions of the nervous system developed in an advanced stage of civilisation are accompanied by a decline in the birth-rate. Finally, sexual selection is undoubtedly a factor, although much uncertainty exists as to its extent of range and importance. The comparative absence of hair from the human body, especially in the female sex, has been attributed with much probability to sexual selection.

#### DARWINISM AND NORMAL HUMAN STRUCTURE AND FUNCTION.

Man is a member of the animal series, and it is reasonable to expect that the ordinary laws of evolution would be exemplified in his structure and in his functions. This we find to be the case. The body of man is built upon the same lines—bone for bone, muscle for muscle, artery for artery—as that of the higher apes. The comparatively few distinguishing features of the human organism have relation to three points—viz., the assumption by man of the erect posture, his acquisition of special manual dexterities, and his higher cerebration. The foot, the hand, and the fore-brain are almost the only points with regard to which the human body differs essentially from that of the quadrumana. Evolution accounts easily and adequately for these differences. Let us look at a few points less obvious than these. Why, out of every score of human beings, are about 19 right-handed and 1 left-handed? On any creationist hypothesis this question admits of no plausible answer, but evolution suggests a highly probable explanation of the mystery. We may fairly assume that as man developed and his functions became more specialised, it was necessary that certain parts of his structure should acquire special dexterities, and that it was by the law of economy that these dexterities were concentrated upon one limb instead of being shared by both. Hence were developed the special manipulations of the right hand. But the law of variation, above-mentioned, would suggest that in a matter of this kind evolution would not act with undeviating uniformity, but would

admit of certain departures from type. And so we find, as we might have anticipated, that about one person in 20 is left-handed. That the special dexterities of the right hand are not innate and predetermined, but the result of development, is shown by the fact that the left hand contains potentially the same aptitudes as the right, and these aptitudes can be successfully developed when the right hand is lost as the result of accident or disease.

Why are the speech centres in right-handed people located on the left side of the cerebrum? The most probable explanation, first suggested, I believe, by Moxon, is that by the same law of economy it was in the interest of the developing organism that the centres presiding over the mechanisms of speech—the precise significance and mode of operation of these centres is not here in question—should be located in one, rather than in both, hemispheres. It is entirely in accord with this theory that the right side of the cerebrum should contain potential speech centres, and that these should be capable of successful and adequate development when the centres on the left side are destroyed by disease. It is, also, quite in line with evolutionary doctrine that the same side of the cerebrum should preside over the fine manipulations of the right hand and the complicated motor mechanisms of speech.

Why are the teeth so often crowded together in the human jaws that the removal of some of them is often a necessity in early life? Evolution affords the probable clue. There are good grounds for concluding that the human jaws are undergoing a progressive diminution in size. This diminution should be accompanied by a corresponding diminution either in the size or number of the teeth, but it is quite in accord with experience in other departments that the two processes should not proceed *pari passu*. Apparently, the diminution in the size of the jaws has outrun the diminution in the size or number of the teeth, and hence the overcrowded state of the jaws which we know to be common. This explanation is adequate and probable, although it might be argued that the teeth are of less utility to man now than in earlier ages, and are hence partially removed from the operation of natural selection.

Many of those whom I address must sometimes have reflected over the curious and apparently clumsy arrangement whereby our food and drink, before entering the gullet, have to pass over the entrance to the air-passages, involving a slight but appreciable risk of foreign matters finding their way into the lungs—a risk slight in health but sometimes serious in disease. The explanation suggested by evolutionary law is that the lungs have been developed from the swim-bladder of an unknown progenitor, and that an organ originally adapted for flotation has been developed as an organ of respiration. The relation of the swim-bladder to the gullet would not have involved the same risks as the relation of the gullet to the air passages. If we accept the alternative view of the origin of the lungs—viz., that they have been developed from a pair of gill clefts, the same explanation will apply.

Why is the septum between the auricles of the heart so imperfect that the passage of blood from one chamber to the other is only just obviated in the normal individual, while patency of the foramen ovale is one of the commonest of malformations? May it not be that we have here an example of imperfect and not yet completed development? May we not expect that the present valvular arrangement for preventing the flow of blood from one auricle to another will in the course of time, under the influence of natural selection, be converted into a permanent and complete septum?

*Darwinism and Rudimentary Organs.*—Perhaps on no subject has evolution thrown a more welcome or a more satisfying light than upon the significance of rudimentary organs. At first sight, nothing can be more puzzling than that there should be in the human body certain organs which are functionally useless to the individual. Of such organs we have the following:—

(a) *The panniculus carnosus*, corresponding to the

muscles which move the skin in the lower animals. There are some persons who possess the power of moving at will the skin of the scalp and other parts, and I believe the music halls once possessed an artist who earned an honest livelihood by exhibitions of his power to throw plates and other articles from his head by contractions of the scalp muscles.

(b) The ear muscles, functionally inactive in most individuals, but in exceptional cases capable of causing movements of the pinna, suggestive of the great importance of the movements of that organ to the lower animals.

(c) The animal ear-point, a projection upon the outer fold of the ear present in some persons and corresponding in position to the pointed ear of many animals.

(d) The rudimentary nictating membrane, or *plica semilunaris*.

(e) The vermiform appendix, functionless in man, but of great importance in some of the vegetable-feeders amongst the lower animals.

(f) *The foramen supracondyloidean.*

In addition to the above, there are certain organs which seem in process of becoming rudimentary and functionless. Cutaneous hairiness is no longer of service to man, and will probably disappear under the operation of natural selection, perhaps assisted by sexual selection. The third molar or so-called wisdom teeth are probably becoming functionless. They pierce the gums late, or in some cases not at all, and they are prone to early decay. It seems probable that the sense of smell, no longer of much practical importance to civilised man, and hence removed from the action of natural selection, is becoming rudimentary. The human toes, with the exception of the great toe, which is of service in maintaining the upright posture, being no longer organs of prehension, and almost functionless, are undergoing elimination.

Rudimentary organs present no difficulty to the evolutionist. They are simply belated survivals of organs once functionally important to the race, but now on their way to extinction and disappearance. No longer under the conserving influence of natural selection, they are very prone to vary and to become the seat of disease. We see this law well exemplified in the case of the vermiform appendix, which is both highly variable in structure and very subject to disease.

It has been suggested that the many feet of the human intestine are simply survivals from a herbivorous progenitor, and of no service to a mixed feeder like man. It has even been proposed that the aid of surgery should be invoked to curtail some of its superfluous folds, which, it is argued, are not only useless, but actually a source of danger. On such a delicate subject I prefer to express no opinion. Modern surgery does not need to be stimulated to fresh fields of enterprise—least of all by a physician.

The bearing of evolution upon physiological processes opens up a wide field for reflection and speculation. We are so apt to regard these processes as fixed and final, while in reality we should regard them as fluid, variable, undergoing a process of adaptation rather than as completely adapted, imperfect, but under the influence of natural selection tending towards perfection, or in some cases, perhaps, exhibiting traces of reversion. The phenomena of digestion, for example, will appeal to our intellect and imagination very differently, according as we regard them as ultimate and final facts, or as part of an evolutionary process. Man has gone through many phases in the crucial matter of his food, and it is likely that he has still in this department a journey to go. Perhaps it might savour of irony to suggest that vegetarianism is a case of reversion to the habits of remote herbivorous ancestors, but the idea is one worth thinking over. When we are urged to lessen our consumption of butcher's meat and rely more upon nuts and salads, the question arises how far carnivorous habits are for man in the natural line of development, how far he should regard himself as essentially a mixed feeder, how far reversion to the dietetic habits of earlier ages would be a gain or a retrogression. The really illuminating thought amongst these somewhat difficult problems is that the



habits of man are not predetermined and final, but the result of countless generations of evolution; that they are neither wholly good nor wholly bad; that, on the one hand, they are worthy of respect as having stood the test of an immense experience, while, on the other hand, they are almost certainly destined to important modifications in the future. In this case, however, as always, natural selection and adaptation to the environment will be the guiding principles to which man in his arduous march through time will be compelled to conform.

(To be concluded.)

## NOTE ON NATURAL HISTORY AND DIAGNOSIS OF CIRRHOSIS OF THE LIVER,

WITH REFERENCE TO THE VALUE OF THE TALMA-DRUMMOND-MORISON OPERATION. (a)

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You are no doubt familiar with the main argument of this note: the differentiation in clinical diagnosis between uncomplicated cirrhosis of the liver and chronic simple peritonitis with perihepatitis.

Yet, it may bear a little consideration, for the diagnostic difficulties at the bedside can only be surmounted by precise pathological knowledge, and this must form the basis of any rational views as to the indications and contra-indications for the Talma-Morison operation.

The diseases that constantly come up for consideration in this class of case are cancer, cirrhosis, perihepatitis, and syphilis. They are not so very frequent: of my last 1,000 hospital patients, about 30 suffered from these diseases. Dr. Hale White, who has specially, in England, written on these matters, finds that 4 per cent. of his patients suffered from carcinoma, cirrhosis, and gall-stones. I find that cancer and cirrhosis in my series were of about equal frequency; then comes chronic peritonitis with perihepatitis and syphilis. These are mostly diagnoses based on post-mortem results, or equally certain evidence in the case of syphilis.

I shall not consider cancer, except to say that in

the diagnosis may be difficult or even impossible, at least until the fluid is withdrawn.

I must, however, emphasise the importance of always considering syphilis: indeed, Rolleston himself, a high authority, says that medical treatment, *i.e.*, by iodide of potash, should constantly be used for the

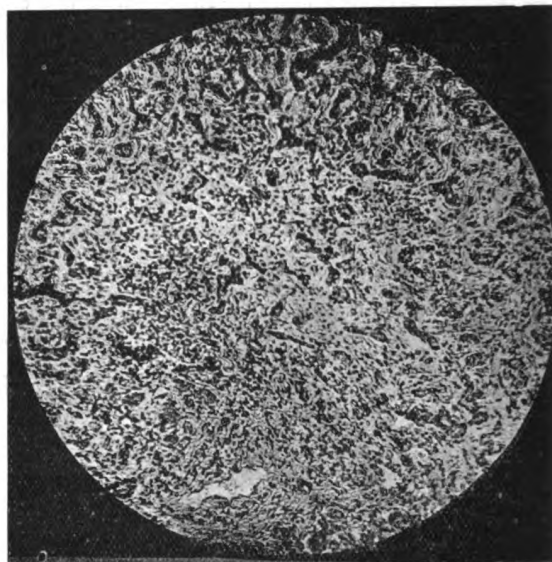


FIG. 2.—C. (high power). Pericellular cirrhosis, such as is seen in syphilis, but sometimes in a rapidly advancing cirrhosis.

purpose of excluding any possible syphilitic disease of the liver. I have seen a typically gummatous liver and spleen in an old lady of 56, who had brought several healthy children into the world. Upon admission she was ill and cachectic, with severe abdominal pain, ascites, a large liver, and a mass in the left hypochondrium. I considered her to be suffering from cancer. My colleague, Dr. Bushby, had under his care a sailor who had suffered from dysentery, and was admitted with a large swelling in the liver, high fever, and a leucocytosis of 22,000. Abscess was rightly suspected, but an exploration revealed a gumma, and appropriate treatment was quite successful.

I show a microscopical section from the liver of a young man, *æt.* 19; it shows a marked form of cirrhosis, but largely intracellular fibrosis and infiltration with round cells—a multicellular cirrhosis: it reminds one of the condition seen in congenital syphilis (figs. 1 and 2). If this is a true syphilitic cirrhosis, it is rarely seen in adults. Of my 5 cases of certain syphilis, the remaining 4 were of the gummatous type. Two I have mentioned, two recovered under treatment and had associated lesions.

This young man was admitted for abdominal pain. There was a history of hæmatemesis. Examination showed a large liver and spleen, ascites, but no jaundice. He said he had had no previous illness, and denied syphilis; nor were there any associated lesions. He died in a comatose state, with low, muttering delirium. The patient was very young for acquired syphilis, and congenital syphilis of the liver terminates at an earlier period in recovery or death.

In general, in addition to a history of alcoholic excess and dyspepsia on the one hand, or syphilis on the other, suggestive points in favour of the diagnosis of specific trouble are the fairly healthy appearance of the patients, the absence of wasting and toxæmia, of hæmorrhage or jaundice, or a large spleen.

But the case of the patient under the care of Dr. Bushby which I have just related, as well as that of the old lady, make one realise how cautious one must be in excluding this disease, and how wise it is to give the iodide and mercury. You may remember that Dr. Sydney Coupland's case of primary splenomegaly, one

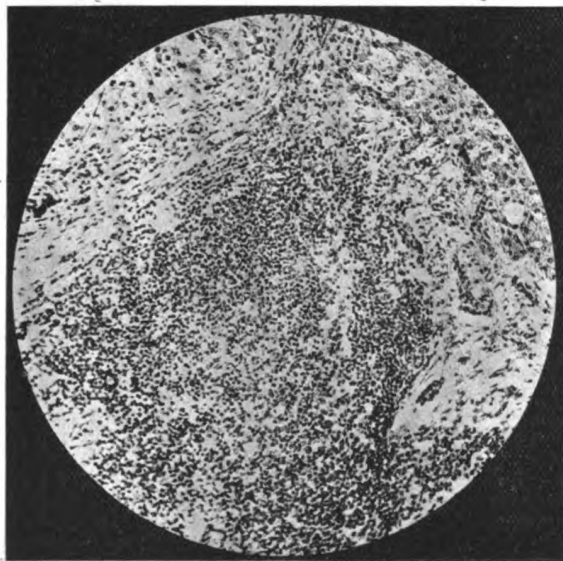


FIG. 1.—C., *æt.* 19 (low power). Showing marked round-celled infiltration.

rare cases the combination of jaundice and ascites with a large liver is sometimes met with, and then

(a) Paper read at the Liverpool Medical Institution.

of the earliest of that class, and a case which attracted much attention and was shown at one of the London Societies, was found to have, on the post-mortem examination, a syphilitic liver, whatever might have been the nature of the splenic lesion.

Coming now to uncomplicated cirrhosis, there is no doubt of this lesion when it is seen in the dead-house, and sections are examined by the microscope. A host of authorities—Murchison, Niemeyer, Fagge, and more recently Hale White—maintain that it has a correspondingly definite and characteristic clinical history. Before considering what the course of this disease is, one must first recollect that though alcohol is a certain ætiological factor, yet the typical disease, both pathologically and clinically, may have an origin distinct from this cause of syphilis, as was the case in a patient—a young woman, æt. 22—in which no definite cause could be assigned (Fig. 3).

In this connection I may mention another example. A young man, 6 feet tall and very powerfully built; seven years ago he had an attack of scarlatina, and his people said that since then he had ailed somewhat with indigestion, but had otherwise been in good health. Alcohol and syphilis could be excluded. He was admitted with hæmatemesis, which terminated fatally in three days. This is one of the rare cases of fatal hæmatemesis which I have seen. The post-mortem showed markedly dilated œsophageal veins, and a liver in varying stages of cirrhosis. It may occur at any age, as was so in a boy, æt. 7, who had been given considerable quantities of alcohol.

It is impossible to say when cirrhosis will begin to produce symptoms: typical hobnail lesions are found in the post-mortem room in those dying from other diseases.

Many tests have been proposed to gauge the hepatic adequacy—notably the production of alimentary glycosuria or lævulosuria, the diminution of the urea in the urine, and the increase in the ammonia consequent on the formation of acid bodies. Kretz has especially urged the importance of these tests; but Bunge, in an exhaustive monograph, shows that many errors arise, and that there are many gaps to be filled, as in the kindred subject of the estimation of the renal adequacy, before one can presume too much on physiological teaching. Moreover, Jakoby, in the recent exhaustive *Ergebnisse der Physiologie*, says: "Anyone who realises how little we at present know

fection of methods." But, leaving this somewhat depressing utterance, I pass to the older and surer ground of clinical observation.

In Table I. you will find the history of a number of such cases.

You notice how rapid is the end when once symptoms have appeared, for how short a time they survive the ascites, and how many die of toxæmia with delirium and coma.

This illustrates very well the opinion especially of the Guy's school of pathologists—Fagge, Moxon, and Hale White.

The last named sums up: "The supervention of ascites in uncomplicated cirrhosis of the liver means that the end is near"; and again: "Cirrhosis of the liver is often latent, but its chief danger consists in the fact that patients suffering from it are liable to the more or less sudden supervention of symptoms which rapidly increase in severity and usually end in death. The chief are a general feeling of drowsiness, ascites, swelling of the feet, and toxæmia."

If this be the natural history of cirrhosis, there does not seem much scope for an operation which aims entirely at the relief of ascites by further assisting the collateral anastomoses between the portal and systematic circulation.

You will notice, too, that in my table of cases laparotomy was followed in some instances within a few hours by terminal symptoms of a nervous toxæmia, and in reading over the records of the 274 cases collected in Bunge's monograph this same fact of a rapid exitus is repeatedly mentioned. I cannot think this is without significance. In tuberculous peritonitis the cure of the ascites is, according to Wright, brought about after laparotomy, by renewal of the opsonic content of the blood to the peritoneal cavity; but in cirrhosis it rather appears that a disturbance of the balance of the circulation seems in some mysterious manner to reduce the already greatly impaired hepatic adequacy and precipitate the latent toxæmia.

The operation is further recommended as a prophylactic measure against hæmorrhage. Curschmann says he has seen fatal hæmorrhage from the dilated œsophageal veins in 12 cases, and it sometimes happens that small repeated hæmorrhages may cause a state of grave anæmia. I imagine this occurrence is not common. Preble has analysed, however, 60 cases of fatal gastro-intestinal hæmorrhage, and finds that, though not rare, it is infrequent. Clinical experience shows that these larger hæmorrhages occur in the early stages of the disease, often as an isolated symptom.

Is it desirable to interfere surgically for prophylactic purposes?

I am rather inclined to think at this period that the same result is likely to be obtained by rigid abstinence from alcohol, relief of the liver by diminution of the proteid intake, and general treatment. It is not easy, from a study of recorded cases, to find proof that a collateral circulation can be formed in such a way as not to put undue strain upon any of the relieving veins. Death from hæmorrhage has still occurred after this operation. If the operation of omentoplexy is performed for this purpose, viz., the prevention of hæmorrhage, the two indications according to Bunge are:—

1. That the disease must be in an early stage.
2. That there must already be evidence from the appearance of the veins over the skin of the abdomen that this spontaneous formation of a collateral circulation is taking place.

In the rare cases in which these two facts can be ascertained and the patient is becoming seriously anæmic from small hæmorrhages, the operation might be considered. It must, however, be borne in mind that though cirrhosis of the liver is a primary local disease, its effects are very general, and I doubt whether local surgery is likely to have better results than the similar attempts which have been made to cope with granular kidney (a somewhat comparable disease) by stripping away the capsule.

Leaving, now, uncomplicated cirrhosis, we come to a variety of pathological conditions characterised by

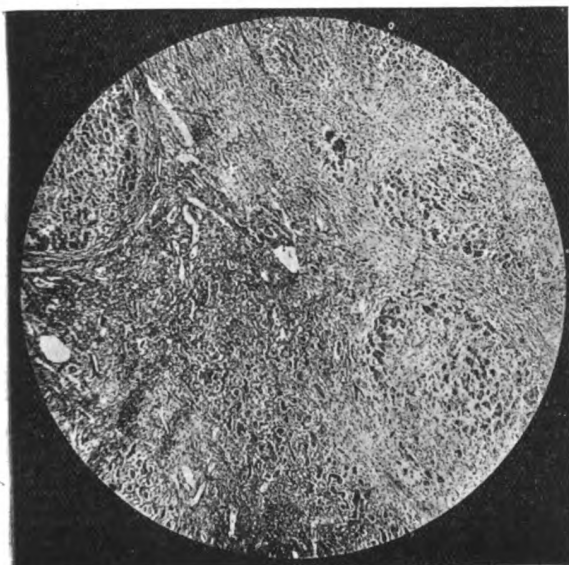


FIG. 3.—F. M., girl, æt. 22, cause not ascertained. Marked cirrhosis.

as to the physiological conditions of urea formation will not expect to gain much diagnostic information from observations on the sick, let alone the imper-

ascites, for the permanent removal of which omentoplexy, etc., have been recommended. These are:—

(1) Chronic perihepatitis and peritonitis, including the sugar-ice liver, but without cirrhosis of the liver.

(2) Chronic peritonitis combined with cirrhosis: this is nearly always a partial perihepatitis and peritonitis.

(3) The cardiac cirrhoses, including the pseudo-pericarditic cirrhosis, and the liver of mediastino-pericarditis.

Simple chronic universal perihepatitis and peritonitis are now known chiefly from the writings of Hale White. The liver is covered with a universal tough white jacket which can be easily peeled off. On cutting into this the liver substance bulges out, and microscopically is found to be healthy; the peritoneum is always similarly affected, the intestines matted together, and the omentum matted up like a thick apron. The spleen capsule is similarly invaded. With regard to its cause, Hale White says:—"It is almost universally associated with granular kidney, and frequently with gout, syphilis and over-indulgence in alcohol, and diseases of the heart and lungs causing backward pressure."

It is probably a less frequent condition than true cirrhosis. In the Manchester post-mortems there were 45 cases of uncomplicated cirrhosis to 8 of simple chronic peritonitis. Dr. Thomas Harris, in his well-known paper on mediastino-pericarditis, discusses this condition and finds that cardiac disease is a more constant associated lesion than granular kidney. Of the 5 cases in which I have diagnosed this lesion, the 2 which came to the post-mortem room had heart disease, and no true renal sclerosis, though, as Hale White says, both may exist, and it may be difficult to say which is the primary lesion (Fig. 4).

In some cases it is part of a general chronic inflammation of the serous membranes, a polyserositis or polyorrormentitis.

The important diagnostic clinical points are:—

(1) The absence of the jaundice, and toxæmic symptoms of hepatic inadequacy.

(2) Recurrent ascites and fair general health, but again the distinction from syphilis may only be made after a vigorous therapeutic test.

These are the cases in which the ascites is withdrawn so many times. In the Manchester figures the average length of life after the first appearance of ascites was over two years.

The cause of the ascites is certainly the peritonitis, and not any obstruction to the portal circulation—at least, dilatation of the portal vein has not been found.



FIG. 4.—H. (low power). Typical nutmeg liver, but marked perihepatitis, in a case of heart disease. There was ascites, but no general dropsy.

An attempt to form a collateral circulation does not, therefore, appear indicated, and unless the Morison operation is regarded as an attempt to obliterate the peritoneal cavity, its usefulness seems to me doubtful. In one of the patients of the Manchester series, although the operation was done, paracentesis had yet to be performed 70 times. The second group in which a chronic peritonitis exists with true cirrhosis is said by Rolleston to be rare. Yet, of 131 cases of simple chronic peritonitis, found cirrhosis in 10.7 per cent.; Sears and Lord in 19 per cent. In Hale White's series of 34 cases there was cirrhosis and general peritonitis in 6. In the Manchester series, 12 cases out of 68; and the average number of days survived after the first appearance of the ascites was 360. The tables give the findings in 124 post-mortem records, and from the clinical history it is certainly true that the prognostic gravity of the ascites is proportional to the amount of the cirrhosis and inversely proportional to the extent of the chronic peritonitis. This fact Ramsbottom expresses diagrammatically:—

C . . . . . A and T . . . death.  
C-P . . . . . A . . T . . . death.  
P . . . . . A . . . . . death.  
C = cirrhosis, P = peritonitis, A = time of appearance of ascites, T = time of appearance of the toxæmic symptoms.

Now since we cannot regard the appearance of chronic peritonitis as itself desirable, we are driven to conclude that when, with cirrhosis of the liver, this peritonitis does appear, such a cirrhosis has a different pathological value from the uncomplicated form where the appearance of the ascites is the herald of death. Here the toxic symptoms of hepatic insufficiency stand out, and the ascites itself is toxæmic. Could we diminish the rate of onset of hepatic insufficiency, then in time a chronic peritonitis might occur, and the associated ascites be of less grave prognostic significance.

The toxæmia occurs because the liver is unable to adequately deal in some subtle manner with the portal blood. The Morison's operation, if successful, supports the natural vascular anastomoses, and still further diverts the portal blood from the liver, i.e., it tends to cause a physiological isolation of the liver.

Yet it must be better to have a diseased liver than none at all.

In the Eck fistula, where the portal blood is diverted directly to the inferior vena cava, symptoms follow very like the toxæmia of cirrhosis in man. It is, however, known that regeneration of the liver cells may take place, and thus recovery of the hepatic functions may occur if the noxious causal agent (e.g., alcohol) is removed; further, in Morison's operation, Rolleston has suggested that the fresh blood-supply brought in this way to the liver may assist in regeneration of the cells.

Thus, on general pathological grounds, the indications for the operation in uncomplicated cirrhosis seem to me to be very limited. In the ascites stage they should be useless; and if, in the pre-ascitic stage, syphilis can be excluded and the alcoholic or other injurious habits arrested, would the ascites appear?

In chronic simple peritonitis the condition of the heart, vascular system, and kidneys must be scrutinised, and if these permit, then it may be justifiable to produce peritoneal adhesions with the object of obliteration of the peritoneal cavity.

In the mixed form, possibly there may in some cases be a balance of argument in favour of the operation.

### SOME NOTES ON ARTERIO-SCLEROSIS AND ALLIED CONDITIONS.

By SIDNEY H. HALL, M.B., C.M.,

Medical Officer Fusehill and Harraby Hall Workhouse, Carlisle.

CAUSATION.—The pathological remains of arterio-sclerosis are well enough known, the thickening of the intima tunica (with probably some change in the media tunica also) and the



narrowing of the lumen of the vessel have been familiar to all since student days. But the precise mode of origin of this condition cannot be said to be properly understood at present. Systematic overstrain, faulty habits of eating and drinking, and certain poisons such as lead, syphilis and toxins elaborated from, or imperfectly removed by, disorganised kidneys probably sum up our knowledge of precise causation. The occurrence of the disease in Russian Jews, who are said to present, in the majority of instances, evidence of early syphilis has been commented upon by many observers. There is, in my experience, a vague history of "muscular rheumatism" almost always to be obtained in such cases, a warning held out by Nature that unless habits are amended, a more severe toll will be exacted later. The disease is one essentially of inflammatory origin, and the smaller arteries, metacarpal, dorsal, metatarsal, are attacked by preference.

**SYMPTOMS.**—The symptoms are fairly definite, the patient not infrequently comes complaining of sudden darting pains, producing a feeling of cramp and numbness. The pulse is often sledge-hammer type, hard and infrequent; the second aortic sound is accentuated. The sphygmogram demonstrates details that the trained finger can almost follow step by step, a short up-stroke, broad crest and gradual down-stroke with a slight dicrotic wave. The left ventricle hypertrophies and general dilatation usually supervenes. If we add renal disease, which is practically always present in advanced cases, the clinical picture is complete and diagnosis should be a matter of ease. I have been struck also with the not infrequent accompaniment of acne, psoriasis, and chronic eczema in this condition. Further most detailed investigation as to the condition of the blood is necessary to a full understanding of this condition.

The subjects of it in the early stages are not easily detected, but it is strongly suspected by the writer that these are much more numerous than is commonly supposed. Many quite young people (contrary to the usually accepted idea) are sufferers from this condition, but are told that they have lumbago, muscular rheumatism, or some allied complaint. It is idle to suppose, as text-books would lead one to, that arterio-sclerosis is a disease seldom, if ever, seen till after the age of 50; there are many people under 30 who are true subjects of it.

**TREATMENT.**—The sheet-anchor of the practitioner in this disease is unquestionably iodides. What their precise therapeutical effect is I do not profess to know any better than others. The time-honoured term "alterative" must be sufficient, though alterative of what we are still ignorant. Suffice it that it is alterative for the better of the condition to which it is applied. There is no doubt whatever of the universal applicability of iodides to this ailment, but there are iodides and iodides, and a rigid adherence to the limited British Pharmacopœia is distinctly inadvisable. There is a notion abroad that if a practitioner finds something outside the hallowed precincts of the British Pharmacopœia which is really useful in practical medicine he must only mention it with bated breath.

Surely this is cramping therapeutic advance mostly unfairly, and one is rejoiced to see that many physicians whose motives are of the purest have boldly discarded this flimsy rule of etiquette and unhesitatingly advanced their opinions on so-called proprietary articles. I say so-called advisedly, for in my knowledge of them, their formulæ and precise chemical composition are for the most part freely declared, and it is therefore open to anyone to

compound the same article. The compound from which I have personally derived most practical benefit, in the treatment of arterio-sclerosis and a number of other ailments for which I at one time relied entirely on potassium iodide, is termed eustenine, and it is stated to be a blend of theobromin with sodium iodide—about 51 per cent. of the former and 43 per cent. of the latter. What the remaining 6 per cent. is I cannot say, but it would undoubtedly be ascertainable from the makers.

The action of this remedy is naturally the result of action of its component parts—iodine and theobromin.

As regards the action of the iodides in arterio-sclerosis there are two views, both of which are tenable and which, in point of fact, may both be taking place at the same time. The first is that the iodides exert an influence on the pathological change which has taken place in the intima, i.e., that they reduce the amount of sclerotic tissue. This is denied by some but is supported by the well-known property of iodine compounds in producing "absorption," as it is termed, a property which can be explained on no pharmacological basis. The second theory is one which has been advanced by German observers, and is to the effect that iodides render the blood less viscous or more fluid, and this results in a better circulation. There is a third, and, to my mind, a more universally applicable explanation, which is that iodides exert an effect on ultimate nutrition and on the work of the excretory organs. This effect on nutrition may be direct or indirect, but it is evidenced by the frequent alteration in weight which is usually noticeable under iodine treatment. This alteration in weight may sometimes be a gain, as, for example in syphilis. The well-known effect on glandular organs, the diuretic effect, the catarrhal state, and so on, induced by iodides are all evidences of powerful action on secretion and excretion. The action on secretion and excretion is bound, of course, to affect the composition of the blood, and it is this amendment of blood composition which results in amendment of the walls of the sclerosed vessels. Some irritant causing sclerosis is removed by the action of the iodide on the secretory and excretory organs, and the rest of the iodide may be used up in an alterative action on the already sclerosed condition. This at least supplies a rational basis for the use of iodides in this condition, and until more exact statements on blood changes are forthcoming nothing more definite can be said.

As regards the action of the theobromin contained in eustenine, I think its principal utility is that of indirect stimulation of cardiac action; blood pressure is lowered and there is an increased volume of blood brought to the kidneys for filtration and the elimination of undesirable products. The diuretic action is also indirect, but is none the less valuable. The drug is of particular value where there is a feeble but regular cardiac action. The blend of the two things produces a marked relief, particularly in acute arterio-sclerotic conditions.

I have found the remedy most useful on these grounds in many other conditions, some concurrent with arterio-sclerosis, such as angina, myo-carditis, asthma and emphysema, as well as for conditions which were apparently independent of vascular changes, such as pleural thickening, long-standing bronchial catarrhs, and certain manifestations of gout and rheumatisms.

The recitation of a few cases will serve to emphasise some of the points to which a general allusion only has been made.

1. Male, æt. 36. This patient was a Pole, who has spent some eighteen years in Nijni Novgorod, and had only been in England about four years, employed as a warehouseman. No history of syphilis. Illness commenced about two years ago with indefinite lancinating pains over right scapula which often passed down the arm and caused a feeling of cramp and numbness, which went off in a short time. For this he treated himself with aspirin, sometimes with benefit sometimes not. This pain had become more troublesome of late, and his right hand frequently became swollen and painful after much use. His knuckles felt tender and hot, and he ascribed the condition to the onset of gout, which he said was in the family. On the occasion of his visit to me the right hand was swollen, of a purplish red colour, and he said it always felt colder than the left hand. Pressure on the joints caused some little pain. Pains were stated to be frequently felt at various points all up the arm, but none could be elicited at the time of examination. The radial artery was distinctly thickened, and the pulse was moderately hard and infrequent. The urine was normal, as were the heart sounds. Temporal artery was distinctly tortuous. Patient confessed to being a large meat-eater and to being fond of spirits. He was given eustenine at the rate of  $7\frac{1}{2}$  grains thrice daily for a week, increased to 10 grains for a fortnight afterwards. At the end of five days the œdema of the hand had disappeared, but patient still felt a little stiffness in the wrist and fingers. At the end of another five days the hand was quite normal, and patient expressed pleasure at being able to clench his fist tightly with the greatest ease. He stated that he did not now "fumble" with the many packages which it was his duty to handle daily. The urine had increased in quantity and the hardness of the pulse quite disappeared. He has seen me several times during the past year, but has only once had to be put back on to this drug for a couple of days.

2. Female, æt. 38. Boarding-house keeper. For over two years has suffered from spasmodic attacks of pain in the right forearm and fingers with tingling numbness and coldness of the fingers. She complained that she frequently dropped things, owing to this feeling of numbness. She had suffered from an attack of rheumatic fever, but said it had left no ill effects. Her hair was quite grey, and there was already a commencing arcus senilis, whilst the temporal artery was distinctly tortuous. The external evidences of age were so pronounced that I was amazed when she gave her age as only 38. On examination her hands and arms showed slight psoriasis, the nails were transversely ribbed, and were said to be very brittle, often breaking off at the ends. She experienced pain in the right arm, particularly after carrying heavy weights or doing some unwonted movement such as hanging out clothes on a line. There was hardly any pulse perceptible at the right wrist, but an examination of the brachial and axillary arteries showed that pulsation in them was normal. The radial artery was obviously thickened, as was the temporal. First aortic sound reduplicated and dilatation of heart fairly marked. She was put on a mixture—potassium bi-carbonate, potassium nitrate, and sodium nitrate for about a week, but returned little better for the treatment. Eustenine was tried in doses of 10 grains thrice daily, but no improvement resulted for over a fortnight; perseverance, however, and an increase of the dose to  $12\frac{1}{2}$  grains thrice daily resulted in a disappearance of every symptom, except the cardiac dilatation, at the end of less than five weeks the dose of eustenine was then dropped to  $7\frac{1}{2}$  grains

again, and a little strophanthus and nux vomica given concurrently for ten days. At the end of this time the cure was, so far as is possible in this condition, perfect, even to disappearance of the aortic reduplication and signs of dilatation. There was a general feeling of well being such as had not been experienced for some time, it was said.

3. Male, æt. 46. This patient had quite suddenly, and without any apparent reason, developed acute pain behind the right internal malleolus. He put it down to a strain in walking, as it developed on his rising from a chair on which he had been resting after a brisk walk. However, it left only a little tenderness, and he rubbed it briskly with some camphorated oil. Next morning the same acute pain was experienced on getting out of bed, and was so bad that he fell on to the floor, and could not rise for ten minutes or so. Bathing with hot water relieved it, and he rested for some days at home. Whilst so resting, the pain again came on with the slightest of movements, and I was called in by his wife, who was getting uneasy. On examining him, I had occasion to flex and extend the ankle-joint, the pain again came on, lasting for three or four minutes, and being so acute as to cause profuse perspiration and collapse. Questioned as regards other pains of a similar character, the patient stated that he sometimes felt an acute stabbing pain down the front of the thigh and in the calf of the leg. There were no nervous signs, knee-jerks and plantar reflexes were normal, and there was no clonus. My first treatment was a smart blister over the seat of the pain, with small doses of potassium bromide. At first this gave relief, and for a few weeks I heard nothing more of the patient. The diagnosis was not clear to me, at the end of this time I was, however, again called in, the attacks having commenced afresh, they were now coming on about every ten minutes, during periods extending over three or four hours, and were leaving the patient in a more or less collapsed condition, and unable to put his foot to the ground. The patient firmly believed the condition to be gout, and stated that he usually experienced attacks of asthma about the same time, and also suffered from palpitation of the heart. A more detailed examination revealed the fact that the posterior tibial artery of the right side was somewhat thickened, and apparently more tortuous than the one on the left side. There was ventricular hypertrophy and marked accentuation of the second aortic sound; radial and temporal arteries thickened and serpentine; albuminuria also was present. Rest in bed was insisted upon, diet was carefully regulated, and eustenine in 10-grain doses commenced thrice daily. In a few days general improvement was obvious, the urine was clearing, attacks of pain were less frequent and less acute, and palpitation had quite disappeared. The dose of eustenine was increased to  $12\frac{1}{2}$  grains. At the end of a further fortnight, patient was able to sit up and exercise his foot freely without any pain supervening. There had been no attack of asthma since commencement of treatment, and the urine was perfectly clear. At the end of another week patient was able to resume work.

4. Male, æt. 54. Merchant living a half-retired life. Has been troubled lately with attacks of bronchial asthma, accompanied by a severe and persistent dry barking cough rendering rest an impossibility, and provoking great exhaustion. Evidences of the strain of life were distinctly marked, hardly an organ of the body performing its functions normally. Physical examination revealed a condition of bronchial asthma with emphysema and dilatation of the heart. Diet and mode of life made the subject of radical alteration.

In addition, iodide of potassium was prescribed, but had to be stopped because of gastric disturbances. Eustenin was prescribed in its place, 7½ grains thrice daily; taken well, and without producing any gastric derangement.

The asthmatic attacks gradually yielded to this remedy, becoming less violent and exhausting, and fewer in number. The bronchial catarrh entirely disappeared after three weeks of treatment, and a lancinating pain on the left side (query commencing angina) has not once been experienced since treatment was commenced. Urine materially improved, appetite returned, and general vigour and well-being now experienced. The patient still takes eustenin 7½ grains daily.

5. Male, æt. 29. Joiner, had suffered from two attacks of rheumatic fever and one rather severe attack of enteric fever. Came complaining of numbness and tingling in right hand and occasional sharp pains in shoulder and down back of thigh, which he ascribed to rheumatism. These pains came on suddenly, and incapacitated him from work. He smoked cigarettes at the rate of 25 to 30 per day, but was otherwise temperate in his habits. No history of syphilis. Pulse on right side so feeble as to cause me to examine carefully for aneurysm. His hands and feet were, he stated, persistently cold. The radial arteries were both distinctly hardened and tortuous, the right one mostly so. Temporal arteries both serpentine, hair almost gone, nutrition very poor. Potassium iodide produced effects on the skin and on the stomach which caused him to complain of the medicine at the end of three days. Eustenin 7½ grains thrice daily was substituted, and at the end of a fortnight there were obvious signs of improvement. The drug was continued for a further fortnight, and during the whole time of its administration no attacks of pain were experienced. Appetite and capacity for work were increased, and weight had gone up 5 lbs. in the month.

Coupled with the administration of any drug, one must have diet and hygiene of life carefully regulated, virtually on the lines prescribed for those of gouty tendency. With a return to a strict adherence to rational hygiene, the use of drugs will not be requisite except on rare occasions. The use of Kissingen salts, massage, plenty of rest, abstinence from alcohol and tobacco and the avoidance of fatigue are all-important factors in treatment.

So far as drugs are concerned, my faith in the combined iodine and theobromine treatment as afforded by eustenin of all conditions included under or accompanied by arterio-sclerosis is now practically immovable, and I commend the method cordially to those who have not already tried it.

## OPERATING THEATRES.

### ST. MARK'S HOSPITAL.

CARCINOMA OF THE DESCENDING LOOP OF THE PELVIC COLON (FORMERLY CALLED THE FIRST PART OF THE RECTUM). ABDOMINO-PERINEAL EXCISION (WITHOUT COLOSTOMY).—Mr. C. GORDON WATSON operated on a woman, æt. 54, a domestic servant. He said he was anxious to render her fit to continue her domestic duties, as she was an old and valued family servant. Until six months ago she was in good health. For the past six months she has been troubled with wind and intermittent diarrhoea, and has lost weight. These have been her only symptoms, and in all other respects her health has been good. Abdominal and rectal examination revealed neither tumour nor tenderness, but the sigmoidoscope demonstrated an obvious tumour 13 centimetres from the anus. The instrument was passed without the aid of an anæsthetic, which, he

pointed out, is never necessary. She has been kept in bed for nine days and carefully dieted. Several carious stumps have been removed. The colon has been thoroughly emptied, and she had a quarter of a grain of morphia half-an-hour before coming to the theatre. Both the abdomen and the perinæum have been carefully prepared. All these, he said, are important points in preparation for a severe operation. The anæsthetic administered was chloroform. The patient was placed in the high Trendelenberg position. A long median incision below the umbilicus was made. Mr. Watson then widely separated the sides of the wound with a self-retaining retractor, packed off the small intestines with gauze, and confirmed the sigmoidoscopic diagnosis by demonstrating a small constricting growth in the lower part of the pelvic colon. This was freely movable, but could not be brought outside the abdomen, otherwise it might have been resected. In many respects this would have been the ideal operation, because there was no distension above the growth, which was quite small, and because there was neither obvious glandular involvement nor adhesions. In other words, the case was an early one and not acute. The mesentery of the pelvic colon was long, long enough to reach to the anus. Mr. Watson decided to separate the rectum and lower half of the pelvic colon, together with its mesentery and the cellular and lymphatic tissues in the hollow of the sacrum (working within the abdomen), and then deliver them through the anus, working from the perinæum. The first part of this operation was then carried out without difficulty and without ligaturing the trunk or main branches of the superior hæmorrhoidal artery. The hollow of the sacrum was cleared by gentle separation with the fingers after division of the parietal pelvic peritoneum on either side of the bowel. The position of the ureters was kept in mind, especially the left. They were not disturbed. A group of vessels (middle hæmorrhoidal) was tied off on either side of the fixed portion of the bowel, with the aid of an aneurysm needle, and no other ligatures were required. The peritoneum of Douglas's pouch was then divided at its reflection on to the upper part of the vagina and uterus. It was then seen that the bowel could be easily pushed down so as to be subsequently delivered through the anus. A little hot saline was poured into the peritoneal cavity, and the abdomen rapidly closed. This stage was completed in half-an-hour. For the second stage the patient was placed in the lithotomy position. After dilatation of the sphincter four clips were attached to the muco-cutaneous junction: equidistant from one another, and the anus thus held open by two assistants. Whitehead's operation (as for hæmorrhoids) was then commenced, and when the mucous membrane had been freed from the sphincters as far as the upper limit of the internal sphincters, the muscular coats of the bowel were cut through, and the rectum peeled off the vagina until it could be freely drawn through the anus. After the bowel had been freed in this way, anteriorly and laterally, some difficulty was encountered posteriorly, probably from the mesentery at the upper part of the sacrum. No force could be used with safety, but eventually the resisting bands were tied off with the help of an aneurysm needle. This proved the only difficulty in the operation, and once overcome the bowel was freely delivered until over a foot of intestine hung outside the anus. A few stitches were then passed through the bowel wall, lightly suturing it to the anal margin, five inches above the level of the growth. The remaining portion (about 12 inches) was cut off with the actual cautery to save time in ligaturing vessels. A small incision was made between the coccyx and posterior anal margin, and a drainage tube passed up to the hollow of the sacrum, a strip of gauze passed up on either side of the gut between bowel and sphincter, and the operation completed by passing a tube into the new anus and lightly packing round it.

Mr. Watson remarked that resection might have been possible by working within the abdomen, but two grave risks would have been run, as the growth could not be delivered outside the wound and packed off:



(a) primary soiling of the peritoneum; (b) secondary soiling from subsequent leakage.

A more radical operation by Miles' method could have been done, but this would have involved a permanent colotomy, which he was particularly anxious to avoid for the patient's sake. It was not considered necessary, for the following reasons:—(1) The length of the mesentery, the small size of the growth, and the absence of adhesions rendered the operation adopted possible. (2) The distance of the growth from the anus made it possible to leave the sphincters and skin round the anus intact, without risk of recurrence in these situations. (3) The operation adopted enabled all the lymphatics in the hollow of the sacrum to be removed. (4) Although part of the pelvic mesentery was left intact, containing possibly infected lymphatic vessels, the early stage of the growth seemed to justify this risk, as a risk counterbalanced by the avoidance of colotomy. He said that the special points aimed at in the operation as performed were:—(1) To excise the growth together with the lymphatic vessels and glands in its immediate neighbourhood. (2) To leave the sphincters intact, and to provide an anus in the normal situation. He pointed out that some of the advantages of a combined method of excision were:—(1) To confirm diagnosis and to obtain a clear view of the actual condition of affairs. (2) To enable the surgeon to see exactly what he was doing in carrying out a radical operation. Some of the disadvantages of a sacral method were:—

(1) A radical operation is seldom, if ever, possible, and always more difficult. (2) The exact state of affairs cannot be seen. (3) The growth may prove to be more extensive than expected, and this may not be ascertained until the operation is so far advanced as to necessitate completion (of an incomplete operation).

The dangers to avoid in the combined operation as performed:—

(1) Cutting off the blood supply of any portion of the bowel left behind, either by ligature or excessive tension on the mesentery.

(2) Damage to ureters and vagina (or urethra in male).

(3) Hæmorrhage in the hollow of the sacrum.

## TRANSACTIONS OF SOCIETIES.

### EDINBURGH MEDICO-CHIRURGICAL SOCIETY.

MEETING HELD WEDNESDAY, NOVEMBER 3RD, 1909.

The President, Dr. JAMES RITCHIE, in the Chair.

A FAREWELL ADDRESS, which will be published in our next issue, was delivered by Dr. RITCHIE.

In proposing a vote of thanks to Dr. Ritchie for his address and his conduct in the chair, Dr. T. S. CLOUSTON said that, whatever views might be held as to Weissmann's theory of heredity, as practical men they could never afford to neglect the enormous influence on the germ plasm of its parental environment.

Dr. BYROM BRAMWELL, the newly-elected President, then took the chair.

Dr. BRUCE and Mr. WALLACE read a paper on FRACTURE, DISLOCATION OF THE AXIS VERTEBRÆ; REDUCTION, RECOVERY,

which will be published in full in our next issue.

In the discussion which followed, Mr. MCGILLIVRAY and Dr. BYROM BRAMWELL pointed out the difficulties which arose as to the exact cause of the condition. Their feeling was that it was difficult to see how mere muscular movements such as had been described could have broken off a normal odontoid, and it was suggested that some malformation, or some disease, rendering it especially weak, might have been present. Dr. Byrom Bramwell agreed that the case was most remarkable. A state of matters of this kind produced by disease might well be recovered from, but a sudden paralysis of the whole body due to injury was, he thought, almost invariably fatal. He supposed that in

this case the pressure must have been comparatively slight.

Dr. BRUCE said he thought there had been one case of fracture of the odontoid from a similarly trivial cause. The odontoid was united to the body of the axis by a layer of cartilage which persisted to some extent throughout life, and he thought that fracture occurred at this point. He believed that the skiagrams shown afforded complete evidence that the odontoid had actually been fractured on October 7th.

Mr. WALLACE said that the credit of urging that the dislocation should be reduced rested with Dr. Bruce, as he himself had been averse to run the risk.

Drs. TORRANCE THOMSON and DENIS COTTERILL read NOTES ON THE SCOPOLAMINE-MORPHINE COMBINATION AS AN ANÆSTHETIC AGENT.

Two different methods of using the drugs were tried:—(1) The administration two hours prior to operation of 1/64 gr. scopolamine with 1/6 gr. morphine sulphate. In the great majority of the 34 cases on which this method was employed, anæsthesia was induced by chloroform and continued by ether. (2) Three preliminary doses of scopolamine-morphine (1/120-1/100 gr. and 1/4 gr. respectively) were given, 2½ hours, 1½ hours, and ½ hour before the operation. The effects of the drugs given in these two different ways differ only in degree, being more pronounced when three preliminary doses are given. The advantage of scopolamine and morphine depends on the fact that the hypnotic and anæsthetic properties of the two drugs associate themselves, while their toxic effects on the respiration and circulation being antagonistic, counter-balance each other. The patient is prepared in the usual way, and the drugs injected subcutaneously into the arm. After so large a dose of scopolamine as 1/64 gr., the patient complains of giddiness, but with smaller doses this does not occur. In most cases the patient goes to sleep in from 10 to 15 minutes, and though he may waken when he is lifted from bed, he quickly falls asleep again. Chloroform can be administered without awakening the patient. Less anæsthetic than usual is required to get the patient sufficiently "under." What is desired is to produce a degree of narcosis deep enough to prevent active resentment when a skin incision is made. In an elderly patient who was regarded as ill-suited for general anæsthesia, a scirrhus of the breast was removed under scopolamine-morphine and local anæsthesia. She lay perfectly quiet while the breast was being dissected out, and when questioned the following day had no idea she had had her operation performed. When a patient awakens during an operation, a few whiffs of anæsthetic suffice to quieten him, which points to the movements being reflex rather than conscious. The method adopted by the writers was to put the patient fairly well under chloroform, and to remove the mask after the skin incision was made, and only to re-apply it on some indication of returning consciousness. Actions prone to disturb the patient are skin incisions, traction on the stomach, parietal peritoneum, or spermatic cord, or moving him about much. In certain stages of abdominal operations it is necessary to give more anæsthetic in order to relax the abdominal wall.

Too much stress should not be laid on the corneal reflex as a guide to the depth of anæsthesia. The pupil contracts as narcosis deepens; the breathing is slower than under ordinary narcosis; it may fall to 12 or less per minute, but is not laboured, and resembles that of ordinary sleep. The pulse is not materially affected. In a case of lobar pneumonia the anæsthetic was successfully administered for the purpose of allowing the uterus to be cleared out. The combination is particularly satisfactory on frail and elderly people. Sickness is conspicuous by its absence, and in the opinion of the Ward Sister the afternoons and evenings of operation days are much quieter than before the routine use of scopolamine-morphine.

The writers drew the following conclusions from their observations:—

1. That scopolamine-morphine does away with the sense of fear prior to operation, and diminishes emotional shock and strain.

2. That the amount of the general anæsthetic required is much diminished, though this, in the writer's opinion, was not one of the strongest points in favour of the method.

3. The mucous and salivary secretions are inhibited by the drugs, and the trouble these give is thus avoided.

4. There is less sickness after operation.

5. Patients sleep on for several hours after operation, and are thereby spared a great deal of suffering.

In concluding, the writers suggested that scopolamine-morphine might be used prior to the induction of spinal anæsthesia, to overcome the disadvantage of the patient remaining acutely conscious of what was going on.

#### ULSTER MEDICAL SOCIETY.

MEETING HELD IN THE MEDICAL INSTITUTE, BELFAST, ON THURSDAY, NOVEMBER 4TH, 1909.

The President, Mr. T. S. KIRK, and subsequently Dr. J. J. AUSTIN, in the Chair.

MR. KIRK, after thanking the members for their help and support during the year of office, introduced Dr. Austin as his successor.

On the motion of Dr. JOHN CAMPBELL, seconded by Dr. W. G. MACKENZIE, a hearty vote of thanks to Mr. Kirk was passed by acclamation.

Dr. AUSTIN then proceeded to deliver his Inaugural Address. He said that, after twenty years' membership of the Society, he could testify to the great benefits which its membership conferred upon the general practitioner, and he urged all, and specially the younger men, to take advantage of the meetings, and to take part in them, even if only by asking questions. As the subject of his address that evening he had chosen the question of

#### LIFE INSURANCE

as it affected the medical man, first as a participator in the benefits of life insurance, and secondly as a medical referee.

Most medical men passed through some lean years when they began practice, and as they were often married at an early period, with increasing responsibilities, the only way in which they could make provision for their families in case of their early death was by insurance. He urged the desirability of early insurance, but said that far more care ought to be given to the selection of an office than was generally the case. The choice would depend partly upon the age of the applicant, and partly on the benefits desired, for some offices offered better conditions to early insurers, and some to later. Some offices offered special facilities for loans for building purposes, and the conditions of payment of bonuses, etc., differed widely. The popularity of life insurance as an investment was shown by the fact that whereas twenty years ago the premiums paid in the year amounted to 17½ millions sterling, last year they amounted to no less than 40 millions.

In his remarks on the second part of his subject, Dr. Austin said that he addressed specially the general practitioner, for, with all due respect to the consultant and specialist, he thought that life insurance work, which was largely a question of prognosis, was best dealt with by the man who was accustomed to watch his patients from year to year, and see the effects of age and illness. The examination called for now is much more thorough than it used to be. It was best made in the quiet of the referee's own consulting room, where he had all his appliances at hand. The applicant's own medical man was as well not present, he thought, though he might be asked for a confidential report. It was necessary for the referee to grasp the general features of the case quickly and give a decided opinion.

*Personal Appearance* should be carefully noted, as it often gave valuable hints.

*Heredity* was undoubtedly important, though he was inclined to think that its importance had been exaggerated

in the past, specially as regards phthisis. If the applicant belonged to a family in which two cases of phthisis had occurred, it used to be customary to reject him, but now, if he had left home early, and had lived in a healthy environment for years, he was often accepted without demur.

*Personal History.*—It must never be forgotten that loss of weight was often one of the first symptoms of phthisis, and that an attack of pleurisy, apparently trivial, was often tubercular, and followed by phthisis.

*Mode of Life.*—The answers to questions about the mode of life were often misleading, and sometimes unintentionally so. He never had met a man who confessed to being a hard drinker. Such could always name someone else who drank twice as much as he did. The importance of temperance was conclusively proved by the statistics of the offices which had temperance and general sections. The latest statistics showed that in one such office the expected deaths in the temperance section were 457, and the actual 274, while in the general section the expected were 461, and the actual 407.

*Physical Examination.*—The capacity for expansion of the chest was more important than its actual size. He had often been surprised to note how few people except singers could take a full breath. As regards height and weight, there were certain well recognised relationships, and a departure of more than 15 or 20 per cent. from these should be looked upon with suspicion. Obesity was often a danger sign, and the girth at the umbilicus should not exceed that at the nipple line. As regards cardiac disease, while aortic regurgitation was a bar, many offices now accepted cases of mitral disease with some penalty, and, as he thought, rightly accepted them. It should be remembered that over-frequency of the pulse was often only due to nervousness, and intermittent pulse to digestive trouble, but an irregular pulse, with several slow beats and then several fast, was a serious matter. Suppuration in the ears must be carefully considered. If the perforation was healed and there had been no discharge for several years, the life might be accepted as an ordinary one. But if a perforation were still present it should only be taken as an extra risk, and if suppuration still persisted the case should be deferred.

The urine, of course, called for careful examination. It should always be passed in the presence of the referee. Note the specific gravity carefully. If this was low, and there were signs of increased arterial tension, the case should be deferred, even though no albumin was found. If albumin were found, its source must be carefully sought for. It was now recognised that there might be physiological albuminuria, especially in young people, depending on some condition of the blood, and not on renal disease. Such albumin might appear in the afternoon, but be absent in the morning. It was abolished by the administration of calcium lactate. In such cases a small additional premium should cover any additional risk. Albumin from renal disease was not abolished by calcium lactate, and was accompanied by casts, etc. Such cases should not be accepted. In cases where a small amount of sugar was present it was often hard to decide. He would examine several times, and if none were found after the first time he would accept. It was very risky to accept a case of persistent glycosuria.

*General Questions.*—Some general questions were asked, as a rule, one of which he did not think fair. The medical referee was asked to say what extra premium should be put on a case he considered doubtful. In his opinion this was a matter for the actuary and the principal medical examiner together. The referee should be asked if he considered the life average slightly, moderately, or greatly under the average, and, having done this, his duty should end.

On the motion of Sir JOHN BYERS, seconded by Dr. W. M. KILLEN, a hearty vote of thanks was passed to Dr. Austin.

A FRESH outbreak of beri beri has occurred at the whaling station, Inniskea, county Mayo. Seven persons are affected, and one has succumbed.

## CORRESPONDENCE.

FROM OUR SPECIAL CORRESPONDENTS  
ABROAD.  
FRANCE.

Paris, Nov. 7th, 1909.

## RE-CALCIFICATION FOR CONSUMPTION.

ACCORDING to Dr. Ferrier, the author of a special treatment of phthisis by the administration of calcareous salts, the cause of the progressive development of tuberculosis is to be found in the insufficiency of lime salts in the organism. The malady itself possessing pre-eminent decalcifying effects, the rational treatment should be that of restoring to the system the minerals necessary to the organism.

This view would seem to be corroborated by certain authors, as Prof. Robin and Dr. Lecreux, who remarked that tuberculosis was particularly noticed in regions where the soil and the water were poor in calcareous salts.

Dr. Ferrier's treatment consists in suppressing all acid in the food which dissolves the minerals, and the administration of carbonate and bi-phosphate of lime:

Carbonate of lime, 10 gr.

Phosphate tribasic of lime, 4 gr.

Calcined magnesia, 1 gr.

At the same time, the patient takes a glass of mineral water (St. Galmier, Pougues, etc.) early in the morning, and half-an-hour before each repast.

All acids, we have said, are excluded from the food, entailing the suppression of wine, beer, cider, liqueurs, butter sauces, lemons, oranges, vinegar, old cheese, certain fish, such as mackerel, herring, salmon.

Bread should be taken in moderation, not more than 10 ounces a day; potatoes, carrots, split peas, eggs, lean meat, cooked fruit, and non-acid jams should form the staple food.

Dr. Ferrier was so convinced of the efficacy of this treatment that he opened a free dispensary in one of the populous quarters of Paris, where hundreds of patients are being treated, and it must be admitted with encouraging success. The patients, recruited mostly from the working class continue their work while following the treatment.

The effect of the treatment would be a more or less rapid improvement in the condition of the lungs, ending finally in sclerosis and emphysema, while the fever disappears after a few weeks, facts confirmed by independent witnesses.

This method, which has the advantage of simplicity, is worthy of imitation, especially with regard to the poorer classes in large towns.

## ZONA.

In every case of zona or shingles there are two morbid elements which should be taken into account for the treatment: the eruption and the pain.

As regards the former, the treatment differs according to the condition in which the vesicles are found. If they have not yet ulcerated, the parts may be covered with some drying powder, as starch associated with boric acid, oxide of zinc, bismuth, or camphor. The region will previously receive a slight coating of vaseline to fix the powder; cotton wool and a bandage terminate the operation. If the pain is severe, the eruption may be painted with a one per cent. solution of cocain or, according to the method of Prof. Chauffard, with a (c) solution of ether and picric acid (one-half per cent.), every third day.

If, on the other hand, the vesicles are ulcerated, the powder should be replaced by applications of glycerine and starch, or by caron oil.

Certain physical agents, and especially the continuous current, have been used with success against the eruption and the pain. Dr. Duclos employs high intensities, up to 45 milliamperes in daily *séances* of ten to fifteen minutes.

Against the neuralgia of zona, several drugs have been used, such as antipyrine, aspirine, salicylate of soda, opium pills, and belladonna, as the malady is essentially of arthritic origin. These agents have a favourable influence on the painful element of the affection. Such irritating applications as collodion, tincture of iodine, poultices, or wet compresses,

should never be prescribed, as they soften the epidermis, thereby facilitating its removal, which should be avoided.

## LOCAL ANÆSTHESIA.

A simple method of rendering hypodermic injections painless for timid patients, is practised by Dr. Salémi, of Nice.

After rubbing the part with a solution of alcohol and phenic acid, and then with ether, he lets fall from a height of two or three inches, drop by drop, ether from a drop bottle for one or two minutes, when the injection can be made without causing any pain.

This method is particularly useful for certain solutions which, in themselves, are painful, amongst which might be mentioned injections of benzoate and bi-iodide of mercury, cacodylates of guaiacol or iron and citrate of iron.

## WHY THE WORLD DRINKS.

From recent official statistics, France consumes the most wine, Italy, Spain, Portugal, Austria, Hungary, and Germany produce wine, but the country which produces that beverage, so much appreciated by our travelling unpledged abstainers(!) in by far the largest quantity, is France; its annual production amounts to one-third of the whole world.

France consumes yearly 163 litres (1 litre = 1½ pints) per head, Italy 84, Spain 83, Roumania 27, Hungary 20, Austria 17, Servia 15, Germany 7½, United States 1½, England 1½ litres.

Germany is the principal producer of beer, but the record of consumption belongs to Belgium with 225 litres, England 125, Germany 120, Denmark 73, United States 76, Austria 65, France 30, Russia 5, Italy 1!!

As regards alcohol, Denmark takes the lead with 6 litres 3 per individual, France 3, 54; United States 3, 30; Russia 2, 40; England 2, 35.

## GERMANY.

Berlin, Nov. 7th, 1909.

At the Naturforscherversammlung, Hr. A. Exner, Vienna, related three further cases of

## TUMOUR OF THE HYPOPHYSIS,

that had been operated on in Professor Hochenegg's wards. The patients were females in the early part of the thirties. In each of the cases the disease was one of so-called malignant adenoma of the hypophysis. Notwithstanding the fact that complete removal was an impossibility, there was no recurrence; the malignancy of these tumours was not very great. He considered hypersecretion, or perhaps changed secretion of the hypophysis to be the cause of acromegaly. The chemical features seemed to be similar to those accompanying gravidity and lactation. Disturbance of the secretion led to disturbance of the function of the germ glands. Hypersecretion of the hypophysis also appeared to be responsible for the adiposity. In two cases there was increase in the thyroid after the operation. Hr. V. Eiselsberg, Vienna, had operated in five cases of disease of the hypophysis. Four cases of the Fröhlich type (adiposity, hypogenitalism) were materially improved, in two complete recovery took place. Excessive visual disturbance disappeared, and the genital function that had been extinguished or in abeyance was restored.

The *Deutsche Med. Zeit.*, No. 84/09, has a communication on the subject of

## ANAPHYLAXIS,

from a report by Dr. Pfeiffer, of Gratz, who investigated the subject with Dr. J. Finsterer as collaborator.

Animals, the communication states, *i.e.*, guinea-pigs, that have undergone no previous treatment, or only by the injection of serum from the healthy human subject, do not react when expressed juice from a cancerous mass is injected either with anaphylactic general symptoms or with an anaphylactic fall of temperature.

On the other hand guinea-pigs that have received by injection into the peritoneal cavity serum from an individual suffering from cancer, and 48 hours later have an equal quantity of expressed juice from the tumour tissues injected, do show severe anaphylactic

symptoms, amongst them an exact measurable anaphylactic fall of temperature.

The serum of a cancerous individual therefore differs from that of non-cancerous persons, in that it contains a free anaphylactic antibody.

In all cases examined hitherto it can be shown that in the course of a carcinomatous affection the patient forms antibodies not only as regards his own tumour, but as regards carcinomatous tissues generally. This free specific antibody can be transmitted through the peritoneum of the guinea-pig, and it here sets up a passive anaphylaxis against tumour issues. This can be proved to be a passive anaphylaxis by making 48 hours later an injection of a sufficient quantity of expressed juice of cancer tissue, when the anaphylactic fall of temperature takes place. From the foregoing the following conclusions may be drawn:—

1. The quantity of anaphylactic bodies in the serum of patients suffering from cancer is, even in the early stages, constantly so high that the same condition of anaphylaxis may be transferred to guinea-pigs.

2. It is proved that these anaphylactic bodies are present in the serum of individuals suffering from malignant disease, and that they are not present in those who are not suffering from any malignant affection, and that the radical removal of a malignant tumour is followed by a decline in the anaphylactic symptoms.

The consequences of this are:—

(a) Purely diagnostic: the presence of the anaphylactic condition in a patient with a tumour proves that a diagnosis of "malignant tumour" is correct.

(b) Regarding indication: it is that an operation must be undertaken where practicable.

(c) Prognosis: If after the operation has been performed the anaphylactic condition disappears, and does so permanently, it is a sign that recovery from the malignant disease has been complete. On the other hand, if there is a return of the anaphylactic condition it is equally an indication that some malignancy still lurks in the patient's system.

The subject was again introduced by the writer at the Naturforscherversammlung, but nothing new was added to it.

## AUSTRIA.

Vienna, Nov. 7th, 1909.

### LUMBAR PUNCTURE IN PERTUSSIS.

DR. ECKERT, assistant to Prof. Hubner, has given us a long record of cases treated in the wards with brom. potassium 0.3 gramme four times daily, and an occasional clysm of 0.5 to 1 gramme of chloral hydrate, with a death-rate of 176 in 476 cases, or about 37 per cent. These figures are confined to children about two years of age. The post-mortems revealed no morbid centre in all the cases, no lesion was to be found, except oedema of the brain and membranes. From this condition it was reasonable to anticipate relief by aspirating the lower part of the cord. Bertolotti performed the operation with marked success on a severe case of a boy three years of age; spasms quite disappear after the second operation. Escherich records several cases of eclampsia he has cured by a similar process.

After these examples, Eckert commenced with four cases of whooping-cough with severe eclamptic contraction, adding a bath to the treatment immediately after the operation, in order to encourage absorption, after relieving the tension in the spinal cord and brain. All the four recovered as by magic. Others have been treated since when unconscious and brought into the wards as dead, the treatment being followed by a speedy recovery. He contends that the bath after the operation is an important adjunct, as it stimulates the respiration, increases the venous flow, and at once removes the oedema, the immediate cause of the disorder. Many lives in his hands have been saved when all therapy was hopeless.

### DIABETES.

Noorden, in one of his clinical lectures, impresses his pupils with the importance of early treatment by a systematic diet in glycosuria. It is hard, he tells

them, to get the "Diabetiker" to conform to a suitable diet, but where this can be done it has a powerful influence over the future of the patient.

He is very sceptical about treatment when the disease is well advanced, and thinks all the vaunted methods of successful treatment by others may be disappointing in his pupils' hands. Diabetes usually commences with transitory periods at first, and may be short at the beginning, but the cycles gradually increase till they are finally established as constant. This is true of both the harmless alimentary and neurogenic glycosuria—both are progressive in nature.

### STITCHING VESSELS.

Ranzi, at the Naturforscher meeting, drew attention to the sewing of vessels which he had practised after the Carellstich method. The last were two cases of the brachial artery; one where the arm was badly crushed and the vessels ruptured, the second from a fracture of the bone and destruction of the vessel. Eiselsberg has recorded two similarly successful cases. The most important part of the treatment is rest and avoiding compression. If gangrene should set in, the application of leeches should first be resorted to.

Schmieden, in the discussion, gave the history of several cases where the vessel had been resected and excellent results obtained; even sclerotic vessels in the mammae, as well as the brachialis, had been successfully treated. Two of the latter, however, ended fatally. After the operation of transplanting a part of a vein for an artery after Wieting's method, the pulse resumed the normal in the arm, but, unhappily, the heart gave way and the patient died after one-and-a-half days.

### REPOSITION AND RETENTION OF FRACTURED FEMUR.

Lorenz raised the old question of treating a fractured femur when broken at the neck. The usual extension method in bed was not satisfactory, as an unsightly deformity was the common result. Bardenheuer's method had not been practised by him, and he had therefore little knowledge of its merits. The head being so small, the surgeon has little power in its correction; however, the shaft should be corrected in relation to the head of the bone by first abducting, rotating inwards, at the same time slightly bending the limb, and then fixing with bandages. Where difficulties present themselves narcosis should be resorted to during reposition and fixation, and afterwards the limb retained in this position sufficiently long for union, but not too long to cause stiffening of the joint. Hacker preferred reposition under narcotics, then extension, and finally a gypsum bandage.

Danzig said the greater number of these cases suffer from coxa vara adolescentium, which weakens the structure. He has practised Bardenheuer's method, with the best results, more particularly with elderly people.

Köln said Bardenheuer's method was advantageous in keeping the fragments apart, and preventing absorption of the bone, which invariably occurred when they were allowed to press on each other. Bardenheuer prefers a weight of 30 kilos (60 lbs.) freely running on the adult.

## HUNGARY.

Budapest, Nov. 7th, 1909.

### THE TREATMENT OF GOUT.

GOUT was a relatively uncommon disease in Hungary one or two decades ago. However, in recent times it has become more and more frequent. Probably the reason lies in the improvement of the nutritive conditions of the people. The statistical data show that twice as much meat is consumed now as was consumed 15 years ago per head. The increase in wages in agriculture enables workmen to have meat once in a day at least, while formerly their only food was bread and bacon. On account of the low price of meat, there are better paid workmen who eat meat three times a day. This fact naturally cannot be left out of count in the consideration of the aetiological factors of gout. The cases are mostly of the lighter type. They are definitely not so severe as

cases reported by English authors. The reason of this fact can be found in the weather conditions. Hungary, fortunately, has very stable weather. Rain is proportionately scarce. The winter is not very cold. The spring is very mild, the summer hot and dry. There are not more than 60 rainy days in a year on an average. As for the treatment, we can boast that we are enabled by Nature to heal gout much easier than any other nation—namely, we have a natural resource of lithia waters, which, being in abundance, are sold at a very low price, so that the very poorest gout sufferer may drink them instead of ordinary water. The constant use of a well-selected water is very beneficial for gouty cases, because the pains quickly abate, and an abundant diuresis sets in, which greatly promotes the solution of uric acid deposits in the joints. It is an every-day experience that the daily quantity of the urine rises to 2½-3 litres without the administration of any drug, merely by drinking mineral waters. Our foremost uric acid solvent water is the "Sultan" water. It has been analysed by Dr. Weiser, Royal Chief Public Analyst, who declared that the great quantity of lithium that it contains places the "Sultan" water above comparison for the treatment of maladies of the kidneys and bladder. Its diuretic and uric acid solvent property is unique, and was recognised even by the authorities at a London exhibition, where it was awarded a gold medal for the stability of its composition. The water is very much used as a table water, too, being very pleasant and refreshing when taken with wine or alone. It has no disagreeable after-taste, it is pure, saturated with natural carbonic acid, and is absolutely sterile, and even when bottled is exempt from pathogenic bacteria. Not only is "Sultan" water one of the very first-class of curative waters, but its agreeable taste and its purity with regard to bacilli render it the best preventive against those diseases that are propagated by water. The vast bottling establishments erected by the management satisfy, moreover, the most exacting demands of hygiene.

Of course, there are cases where mineral water alone fails to check all the unpleasant symptoms connected with gout. In such cases colchicin stands in great favour with Hungarian doctors. When we remember that Hungary is possessed of really efficacious sulphuric thermal spring baths, like Pistyán (with 3,600 foreign guests last year), and Felix Bath, near Nagyvárad, then it will be seen that a gouty patient can consider himself lucky if by chance he lives in Hungary.

## LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

### VIAMI REMEDIES.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—Supplementary to the recent letter of "General Practitioner" on the Viavi treatment, in the MEDICAL PRESS AND CIRCULAR, I would call attention, as an example that should teach the public the folly of belief in advertisements, to the rise and fall in popularity of so-called medical vibrators.

More than a quarter of a century ago, the late Dr. Mortimer Granville, taking up an old idea, invented an instrument by means of which vibration could be used conveniently. The application gave the illusion of a mild Faradaic current, and the present writer was instrumental in presenting this "percutor," as it was termed, to the French Academy of Medicine, and wrote a short note in the *Progress Médical*, when Boudet de Paris devised a similar apparatus, claiming the priority for Dr. Granville.

Charcot and others afterwards used improved appliances of the kind for the treatment of nervous disease, and especially of neurasthenia, and a certain number of psychosthenics have no doubt been distracted and amused back to a more healthy condition in this way; but until a few years ago the treatment was applied by specialists only.

Then came the craze for physical culture, and an

intelligent charlatan, recognising the possibilities of the idea, devised and launched on the world the Voodoo vibrator.

Testimonials from members of Royal families, of the aristocracy, of the legislature, of the medical profession, and especially of the clergy, simply rained on the promoters, and the amount of money spent in advertising is sufficient proof of the profits that must have been made.

A chemist at Ramsgate told me recently that two years ago he sold daily three or four vibrators at 30s. each, whereas at the present time they are a drug on the market, and he would be willing to sell those remaining at less than a tenth of their original cost.

The public, which is always ready to be duped by every new quackery, has had then, as it always does in the long run, sense enough to discover the fallacy of this particular humbug, and vibro-therapeutics have been relegated for a time to their proper place in regular medicine, as an exceptional treatment for special cases.

The Voodoo is, however, still used occasionally by empirics, but these know that when a patient treats himself the efficacy of the instrument decreases as he penetrates its mystery and tires of it as a toy. To keep up interest it should be applied from time to time only, with discretion, and the augur should not reveal the simplicity of its mechanism. Such is the formal opinion of a practitioner in stello-therapy, whom I occasionally meet, more or less professionally, and who makes an excellent living out of this hitherto neglected art. Stello-therapy, it should be said, consists in the application of electricity by the hand of the operator to a patient immersed in water.

"This mode of treatment," says the "Professor," for such is my *confrère's* (are we not all brothers?) self-conferred title, "is so marvellous, so *épatant* even, that it almost attains to the supernatural, to the *au-delà*. It is for this reason that I call it stello-therapy, and a high-sounding name necessarily increases its *prestige*."

I will add that my colleague, whom I employed formerly as a masseur, although claiming to be able to cure any kind of pain, professes not to practice medicine. Notwithstanding this, he has done several terms of imprisonment for illegal practice, the last time for laming a boy. This, of course, has only enhanced his popularity.

It seems to me, Sir, that the education of the people concerning quackery might be helped by the publication of a book on the same lines as the articles in your columns by Dr. David Walsh, but the exposures made by Dr. Walsh might be supplemented by a demonstration of the fact that every "new discovery" is simply the re-edition of an exploded imposture, and that the same claims have always been made in the same words, always believed by the credulous for a time, and always discovered ultimately to be fraudulent.

Such knowledge might protect the public from two kinds of purchases:—(1) Medicines which are harmful because they really contain powerful, but dangerous drugs; (2) medicines which are simply swindles, because they contain nothing at all.

An American remedy of the latter class was exploited towards the middle of the last century, with such success that it seriously interfered with the business of other irregular practitioners, and an old man who had taken it, dying in the ordinary course of Nature, was said to have been poisoned by its use. The proprietor of the medicine was accused of manslaughter, and notwithstanding the testimonials of many grateful purchasers, things were going so badly for him, that in order to vindicate the innocuity of his nostrum, he was obliged to tell the truth, and proved irrefutably that it contained medicinally nothing at all!

A book of the kind suggested should show that plausibility is not proof, and that pseudo-scientific explanations are baits to be swallowed by the credulous and by those who wish to be deceived. Examples could be multiplied *ad infinitum*, but are superfluous here.

In a recent brochure, however, "*Un Voyage Chirurgical aux Etats Unis*," my friend, Professor Pozzi, has

given an instance of colossal impudence which is worth relating, and had he not given a facsimile of the text of the journal lending itself to this cruel swindle, it would seem almost incredible.

The advertisement in question consists of an illustrated article for which, says Professor Pozzi, \$250 is paid per insertion. The largest of the six cuts represents a sharp-pointed metallic cone, held by a hand which is slowly forcing it through the "pores" of the abdominal wall.

The article is entitled "New Bloodless Surgery: Remarkable new operation which prises open a hole without cutting the flesh, and enables the surgeon to reach and remove the appendix without pain or bloodshed." Fig. 1 shows "the curious new, smooth, round instrument called the 'Reidiseam,' which opens a hole in the tissues without shedding blood or causing any shock." Fig. 2 shows "how the instrument is inserted into the abdomen three inches to the left of the hip-bone, making a hole as large as a silver dollar through which the diseased appendix can be reached."

The third cut shows a large circular hole, held open by eight curved retractors, attached by straps to a circular ring. The legend says: "New expansion ring with which the hole (in the wall) is held open, whilst the surgeon extracts the appendix." At the bottom of the page is a photograph representing four nice-looking nurses watching the operator, whose hand is pressing on a sheet, a thoughtful-looking assistant (the pathologist, probably) in the background. "The patient is under the white sheets, and all preparations have been made for the operation."

The other illustrations are a photograph of a child standing at the top of some steps before an open door, with a glass jar in her hand. This represents "a little girl patient, with her appendix in her hand, leaving for home at Rome, N.Y., on the day of the operation"; and, lastly, to convince the most unbelieving, another photograph of a huge ligatured appendix. This, evidently the chief *pièce à conviction*, the chief proof of *bona fides*, is labelled, "Diseased appendix after removal; a, old protuberance; b, newly-formed lump caused by inflammation."

I am, Sir, yours truly,  
OSCAR JENNINGS.

#### SUPPURATION IN THE ACCESSORY NASAL SINUSES.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—In his admirable clinical lecture on the above subject, Dr. James Donelan seems to have overlooked or omitted to mention the large class of cases of suppuration in the antrum due entirely to dental causes. During the past twenty years I have seen scores of such cases. The diagnosis has always been made by surgeons, who have sent the patients to me in order to have the antrum opened through the dental alveoli, extraction of a tooth when called for, and the construction of a drainage instrument through which syringing of the cavity can be carried out. The ætiology of these cases is simple. The roots of several teeth approach the floor of the antrum, and are often covered only by a very thin layer of bone. Abscess around such roots is very liable to burst into the antrum. Very often the apices of the affected roots become at once necrosed; necrosed root, like necrosed bone, keeps up a discharge of foul pus. This accumulates constantly on the floor of the antrum; it cannot flow out until it reaches the level of the ostium; it often, no doubt, infects the whole mucous lining of the cavity, and gives rise to what may be truly called an empyema. The pulps of the involved teeth are always dead owing to exposure and inflammation following caries. Sometimes the teeth are filled, the pulps having been removed by a dentist. Very often the teeth are painless, or only very slightly tender, the free escape of pus into the antrum doing away with the usual signs of "gumboil," as well as preventing severe pain. There are, however, very often the characteristic pains of antral empyema, localised or neuralgic; and, besides this, the chief symptom is flow

of foetid pus from the nostril of the affected side, especially when the head is bent forward. The vast majority of such simple cases yield to treatment—the extraction of the tooth and the daily washing out of the antrum with disinfectants of suitable kinds.

I am, Sir, yours truly,

A DENTAL SURGEON.

London, W., November 4th, 1909.

P.S.—I trust you will allow me to conceal my name. I am a little sensitive in the matter of personal advertisement.

#### THE ETHICS OF JOURNALISM.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—An illuminating side-light on the ethics of newspaper proprietorship is provided by Lord Bray's Indecent Advertisements (Amendment) Bill, which has now been printed, with the following explanatory memorandum:—

The object of this Bill is to strengthen the law against the publication of improper advertisements. The Indecent Advertisements Act of 1889 has had considerable effect in preventing the distribution of certain classes of unsavoury advertisements, but the definition of indecent advertisements in that Act has been found not to be wide enough to cover a number of advertisements of a character similar to those struck at by the Act. And while powers exist under the Post Office Protection Act of 1884 for preventing the circulation of such matter by post, there are no adequate or summary means of suppressing the publication in newspapers of advertisements which it is illegal to distribute in the streets.

The necessity for this Act goes to prove what Mr. Sewill in his paper this week suggests, namely, that a great number of newspaper proprietors are dominated by what is nowadays styled "commercialism"; they consider every means legitimate in money-making, so long as it does not render probable a criminal prosecution.

Yours truly,  
AN OBSCURE PRACTITIONER.

November 6th.

#### SPECIAL ARTICLES.

##### HEALTH OF DUBLIN.

SIR CHARLES CAMERON, Superintendent Medical Officer of Health of Dublin, has addressed to the Lord Mayor a letter dealing with the state of public health and sanitation in the city.

From the Report, it appears that there has been a reduction in the death-rate of Dublin, both from all causes and from the zymotic diseases, during the last quarter of a century. In the five years ended 1883, the mean death-rate from all causes was 34.26 per 1,000 persons living, and the zymotic death-rate was 5.84. In the five years ended in 1908, the death-rate was 23.8, including a zymotic death-rate of 1.98. Nevertheless, the general death-rate was far in excess of the mean death-rate in the English towns. In 1908 the mean death-rate in the 76 largest English towns was 15.8; the rate in Dublin was 23. The highest urban death-rate in England—namely, 19.8—was in Oldham. The zymotic death-rate averaged in the 76 English towns 1.59, or, excluding London, 1.67; the rate in Dublin was 1.9.

In some years (Sir Charles states) the infantile death-rate has been slightly lower in Dublin than in the English towns, *minus* London. In 1908 it was higher. The deaths of infants under one year of age were in Dublin 146 per 1,000 births. In London the rate was 113, and in 75 large towns 134. The rate in Dublin should be lower, as mothers are far less occupied in industries which would prevent them from nursing than is the case of most English towns.

The high adult mortality is believed to be due to a larger number of very poor in Dublin than in most English or Scottish cities. In order, to some extent, to counteract the effects of poverty, Sir Charles sug-



gests certain measures which should be taken in hand by the Corporation:—

(1) A considerable extension of the provision of healthy dwellings for the working classes, and especially of the very poor ones.

(2) The regular cleansing of the hundreds of streets, lanes, courts, etc., not in charge of the Corporation.

(3) The medical inspection of school children, and power to provide meals for those found to be insufficiently fed.

(4) Provision for the housing of poor consumptives still at work, and of those unfit to labour.

(5) The efficient carrying out of the object of the Early Notification of Births Act.

Sir Charles lays great stress on the necessity for the better housing of the poorer classes, large numbers of whom at present live in rooms rented from 1s. to 2s. 6d. a week. No doubt, he says, there would be some loss to the ratepayers in providing such housing accommodation, but is it not generally admitted that the poorest and most dependent sections of the community naturally expect to receive help from the more fortunately circumstanced classes? There is no city in these countries which requires a more extensive system of housing improvement to be carried out than Dublin.

The Report urges the Corporation to deal with the cleansing of the 900 streets, lanes, alleys, courts, passages, etc., not in their charge, and pointed out that the cost could be recovered from the owners of the property abutting on the streets, lanes, etc. The dwellings in these lanes, etc., were occupied by about 12,000 persons.

In conclusion, the Medical Superintendent Officer of Health suggests that Parliamentary powers should be obtained to (1) deal with derelict places; (2) the medical inspection of children; (3) the compulsory closing of primary schools during epidemics, chiefly affecting children; (4) the power to supply milk to the infants of the very poor; (5) to empower the Corporation to provide rooms for poor consumptives in the houses in which their families reside; and (6) to define what is a public sewer and what is a private drain.

## MILITARY & NAVAL MEDICAL NOTES.

**CONVALESCENT HILL DEPOTS IN INDIA.**—A salutary arrangement in regard to the time for transferring men from the hill depôts to the plains of India is now in force. In former times these cases, sent to the hills early in the hot weather, used to be sent to the plains early in October, when the weather was still muggy and hot, but now the transfer is, very properly and fitly, to be made as late as November 1st, or even up to the 15th of that month.

**DENTAL SURGEONS FOR THE NAVY.**—The Admiralty have approved of three civilian dental surgeons being employed at Chatham, the present dental surgeons doing the necessary work at the Royal Naval Hospital, Royal Marine Barracks, and for all marines from ships. Two dental surgeons, working in different rooms at the Royal Naval Barracks, are to divide the remainder of the dental work of the port between them, one visiting Sheerness as occasion requires for examinations and minor dentistry. Two civilian dentists are to be employed in future at Shotley, and one whole-time civilian dentist at the Royal Marine Depôt, Deal. If possible, every man and boy on home service will be examined and treated, when necessary, once a year. All this has become necessary owing to the large invaliding on account of defective teeth.

It seems odd that at this late date the Under-Secretary of State for the Navy in France should direct that every sailor should be provided with a medical history sheet, on which should be entered a variety of particulars about the man, when in our

Services, both military and naval, a system such as this has existed for many long years. These sheets are always transferred with each man's transfer from corps to corps, or ship to ship, and give particulars as regards height, weight, chest girth, vaccination, dates of admission and discharge, days in hospital, disease, treatment, etc. In the case of the French, some more stringent rules are directed in the transfer of medical history sheets under sealed orders, and in diseases of a "confidential nature" (whatever these may be) being denoted by a number contained in the nomenclature used for the purpose.

**BOARDS OF HEALTH AND THE FRENCH NAVY.**—A circular has lately been issued by the Naval Under-Secretary of State, establishing Boards of Health in the Naval ports, the chief Board's location being in Paris, at the Marine Ministry, comprising four civilian members of the U.S., of States selection, and four Naval members, one being the Surgeon-General of the French Naval Medical Service (*Service de Santé*). A pharmaceutical chemist in charge of the analytical laboratory of the Central Store department of the Navy is also a member. Boards in each port will be comprised of eight members, including the Medical Director-General of the garrison and the bacteriological expert of the port. These measures cannot but be attended with the best results, for of late the drinking water in some places has been found impure, and in one (Cherbourg) caused isolated cases of enteric. Fortunately, extension of disease was prevented by prompt measures.

**RESULT OF WAR RATION TEST.**—The result of the test alluded to in our issue of October 27th is said to be satisfactory physically. Some men, though losing flesh, as was to be expected, retained their strength. None were specially selected for the experiment, as it was desired to secure average results. The men were all 20 years of age and upwards; several had reached 30, and all were trained soldiers. Smoking was discouraged, and intoxicating liquors were not supplied; neither were they allowed to be purchased. The men have been granted additional pay, and have been thanked for offering themselves for the test and abiding by the regulations issued. The medical report so far as the condition of the men generally is concerned, broadly summarised, may be put down as follows:—First, loss of weight due to absence of butter, cheese, milk, and of sufficient fatty foods; second, neuralgia caused by run-down system, insufficiently nourished; third, headache, indigestion, etc., due principally to absence of green vegetables.

## MEDICAL NEWS IN BRIEF.

### Scarlet Fever from Cows.

The London County Council have issued a report by their Medical Officer submitting a report by Dr. W. H. Hamer and Dr. T. Henry Jones on an outbreak of scarlet fever last June in London and Surrey, and a bacteriological report by Dr. Mervyn Gordon.

According to Sir Shirley Murphy's report, the outbreak affected upwards of 400 persons, who consumed milk obtained from a particular milk company. He discusses the two hypotheses of human or bovine origin for the fever. The former hypothesis is dismissed, as careful inquiry failed to yield any evidence of a human source of infection.

On the question of bovine infection the report says:—"Under similar circumstances Sir William Power, in 1882, when investigating an outbreak of scarlet fever in certain London districts, made the suggestion that inasmuch as 'there is one sort of relation between scarlatina and accidents of the puerperal state, another sort of relation becomes comparatively easy of belief,' in fact, that 'if scarlatina in man have other animal source than human source, it may be that one such source is the cow that has recently calved, a cow either not at all ill (except for her par-

turition), or not so obviously ill as to prevent her milk being used for human consumption.' The suggestion thus tentatively made in 1882 at once assumed large importance upon the demonstration by Sir William Power, in 1885, of the bovine origin of scarlet fever occurring in persons consuming milk from a Hendon farm, the cows at which were affected with an eruption of the teats and udder. A similar development of scarlet fever in man, associated with the consumption of the milk of similarly affected newly-calved cows, has been observed in a number of instances since that date. In London in 1892, and again in 1894 and in 1902, considerable prevalences of scarlet fever due to infected milk were strongly suspected to have been originally of bovine origin. In the present instance a like possibility was necessarily entertained, and it has been found possible by study of the farm operations, in minute detail, to show that just at the time when the milk first began to show infectious property, there was added to it the milk of three recently calved cows, the calf of one of which had died after being suckled by the cow for four or five days. These circumstances, together with the fact that the three cows mentioned, and other cows at the farm, showed at the time of the inquiry appearances upon their teats and udders suggestive of Hendon disease, render it probable that a morbid condition of the cow was responsible for the subsequent human illness."

#### Cats and Plague.

THE Authorities of the German colony of Togo have issued a decree ordering that in public buildings in the colony where natives congregate—such as schools, hospitals, or prisons—cats are to be kept officially. The explanation of this order is contained in a decree of the Governor of the colony dealing with the danger of the introduction of plague into Togo from the British Gold Coast. The Governor says the bacteriologist, Dr. Koch, had reported successful experiments made with cats for the eradication of rats in plague-infected and plague-menaced harbours of China. In Hong Kong orders had already been issued providing for the maintenance of one cat in every house, and three cats in larger houses. An investigation made by the German Government at Lome, Togo, showed there were rat-eating cats there, and that the rats were not generally to be found in houses where cats were kept. It is therefore officially advised that the number of cats in the coastal towns primarily exposed to plague-danger, should be increased. Besides appointing official cats to public buildings in the colony, the Government recommends all Europeans and natives to adopt this precaution against plague.

#### Memorial to Professor Cunningham.

A WELL-ATTENDED meeting was held in the Medical School, Trinity College, Dublin, last week, to inaugurate a memorial to the late Professor D. J. Cunningham, the Provost in the chair. The following resolutions were adopted:—

"That a memorial to the late Professor Daniel John Cunningham be organised to commemorate his connection with Dublin University."

"That the friends and former pupils of Professor Cunningham be invited to subscribe to the memorial—subscriptions not to exceed £2 2s."

"That the memorial take the form of a medal and prize to be awarded to the candidate who obtains highest marks in Anatomy at Part I. of the Intermediate Examination held in June; and, further, that a portrait in bronze of the late Professor be placed in the school."

"That a General Committee be formed of those present, together with such other subscribers as may desire to act; and that the following constitute an Executive Committee to carry out the resolutions of this meeting:—The Regius Professor of Physic, the Regius Professor of Surgery, the Hon. Mr. Justice Boyd, the Right Hon. Jonathan Hogg, Dr. A. C. O'Sullivan, Mr. E. J. Gwynn, and the four chief demonstrators of Professor Cunningham."

Those who spoke at the meeting were Dr. James Little, Regius Professor of Physic, the Dean of St.

Patrick's, Mr. Justice Boyd, Dr. A. C. O'Sullivan, Sir Charles Ball, Regius Professor of Surgery, Mr. E. J. Gwynn, Dr. A. F. Dixon, and Dr. T. J. Moorhead.

#### Hemel Hempstead Workhouse.

AT Hertford. on Saturday last, in charging the Grand Jury, Mr. Justice Lawrance referred to the charge of manslaughter against May Rose Bellamy, one of the nurses at the Hemel Hempstead Workhouse Infirmary, for causing the death of an old man named Edward Allmond by bathing him while he was suffering from bronchitis on October 4th. His lordship said Allmond was admitted to the workhouse in the ordinary way, and after being there for two or three days it was reported that he was unwell, and he was removed into the infirmary ward. He was not sent there as a man suffering from some disease or for whom any particular treatment had been prescribed. But in this case there was no intimation from the doctor that there was anything the matter with him. The bath was administered in the usual way, under the supervision of the porter, but the effect of it was that the man died the same day. Then it was said by the nurses that that was the first time they had heard that he was ill. The question for the Grand Jury was whether this woman was guilty of such culpable negligence as to constitute a *prima facie* case of manslaughter against her.

The Grand Jury threw out the bill, and the accused was discharged.

#### Metropolitan Counties Branch British Medical Association.

THE Council of the Metropolitan Counties Branch have made arrangements for a meeting at which the direct representatives (for England and Wales) of the profession on the General Medical Council, Drs. Langley Browne, Latimer and McManus, will address their constituents who reside in London and the neighbourhood. The meeting will be held on Monday, November 22nd, at the St. James's Vestry Hall, Piccadilly, W. (close to Piccadilly Circus), at 4.30 p.m. All members of the profession are invited to attend.

#### The Red Cross.

THE Duchess of Portland should have presided over a meeting at Nottingham on Saturday to organise a branch of the Red Cross Society, but her Grace was unavoidably absent. The Duke of Portland, however, attended, and commended the objects of the society to a gathering thoroughly representative of the city and county. Colonel McPherson, of the War Office, thoroughly explained the scheme for organising voluntary-aid detachments of men and women in case of military operations being carried on in this country, and said the most important feature of such work was concerned with the transport of the wounded.

#### A Workhouse Scandal.

THE Chairman of the Isle of Wight Board of Guardians, Alderman Fellows, denies the statement attributed to him that he saw patients dying by the side of the bed in the workhouse infirmary. An inquest will be opened on the body of an epileptic patient of the infirmary who died in fits.

THE EARL OF ARRAN, K.B., Sir James Crichton-Browne, M.D., F.R.S., and others, received a party of scientists, on Saturday, at the Bovril Factory in Old Street, E.C. The guests included Professor Kenwood and the members of the South-Eastern Section of the Sanitary Association. The visitors were conducted in parties over the premises of the company. The laboratories, where the raw materials are subjected to the scrutiny of experts, were then inspected, and the visitors were shown the concentrated beef materials in the form in which they arrive direct from the factories of the vast Bovril estates of some ten million acres.

In the milling-room was seen the preparation of the albumen and the fibrin—the feeding part of the beef—and it was interesting to note that, during the whole process of manufacture, Bovril is never once touched by hand.

## NOTICES TO CORRESPONDENTS, &c.

**CORRESPONDENTS** requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

### SUBSCRIPTIONS.

SUBSCRIPTIONS may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s.; post free at home or abroad. Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially-appointed agents. Indian subscriptions are Rs 15.12. Messrs. Dawson and Sons are our special agents for Canada.

### ADVERTISEMENTS.

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The following reductions are made for a series:—Whole Page, 13 insertions, at £3 10s.; 26 at £3 3s.; 53 insertions at £2, and pro rata for smaller spaces.

Small announcements of Practices, Assistances, Vacancies, Books, &c.—Seven lines or under (70 words), 4s. 6d. per insertion; 6d. per line beyond.

THE first of the new series of popular Saturday night lectures at Sheffield University was given by Dr. Herbert Henry on Saturday. His subject was, "The Romance of Modern Medicine." Dr. Henry said it was owing to the courage of Lady Mary Wortley Montagu, whose husband was ambassador at the Porte, that in the 18th century inoculation against small-pox began to be practised in England. The Brahmins and the Chinese, ten centuries before Christ, had employed similar methods. The method was dangerous, since the actual small-pox germ was used sometimes with fatal results. The cow-pox inoculation discovered by a Gloucester farmer, really started the present almost universal system of vaccination. It was strange, commented Dr. Henry, that in Gloucester now there should be a colony of people violently opposed to it. Of the value of it there could be no doubt whatever on the part of those who would look facts in the face. The discovery of germs might be said to have revolutionised medicine. In France last century, anthrax broke out amongst cattle in a terrible form, and in some cases shepherds also succumbed. That led to the discovery of bacilli. In the field of investigation opened up by that discovery, a young Frenchman named Coque had done great work. He had facilitated examination by straining bacilli, and by discovering that they could be made to grow outside the human body. Following upon this came to light one of Nature's great truths, that Nature always set up resistance to the inroads of disease, or, in other words, provided a counter-agent or anti-toxin. In exemplification of this, Dr. Henry spoke of the effect of rowing upon the hands of a man unused to the exercise. Blisters were raised, but if the exercise were discontinued before a sore resulted, and renewed only after a certain interval, the skin became hardened. Thus the poison of a disease, if administered in a mild form and at stated intervals, produced, in contact with the resisting force in the blood, an anti-toxic effect.

## Meetings of the Societies, Lectures, &c

### WEDNESDAY, NOVEMBER 10TH.

HUNTERIAN SOCIETY (17 Finsbury Circus, E.C.).—8.30 p.m.: Dr. A. C. Jordan: X-Rays Diagnosis for the Physician.

UNITED SERVICES MEDICAL SOCIETY (Royal Army Medical College, Millbank, S.W.).—5 p.m.: Clinical Demonstration.

MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22 Chancery Street, W.C.).—4 p.m.: Mr. P. J. Freyer. Clinique (Surgical). 5.15 p.m.: Lecture: Mr. H. S. Collier: The Surgical Complications of the Inflammations of the Colon.

NORTH-EAST LONDON POST-GRADUATE COLLEGE (Prince of Wales's General Hospital, Tottenham, N.).—Clinics: 2.30 p.m.: Medical Out-patient (Dr. T. R. Whiphram); Skin (Dr. G. N. Machen); Eye (Mr. R. P. Brooks). 3 p.m.: X-Rays (Dr. H. Pirie).

### THURSDAY, NOVEMBER 11TH.

ROYAL SOCIETY OF MEDICINE (OBSTETRICAL AND GYNECOLOGICAL SECTION) (20 Hanover Square, W.).—7.45 p.m.: Specimens will be shown by Dr. Arthur Giles and Dr. T. G. Stevens. Paper: Dr. Comyns Berkeley and Dr. Victor Bonney: Leukoplakia Vulvitis and its Relation to Kraurosis Vulvæ and Carcinoma Vulvæ, with epidiascopic demonstration.

OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM (11 Chandos Street, Cavendish Square, W.).—8 p.m.: Card Cases by Mr. S. Stephenson, Mr. R. D. Batten, and others. 8.30 p.m.: Mr. W. M. Beaumont: Oxycephaly.—Mr. W. B. Harman: (1) The Measurement of the Desire for Binocular Vision by Means of the Diaphragm Test; (2) The Measurement of Hyperphoria by Means of the Diaphragm Test.

HARVEIAN SOCIETY OF LONDON (Cafe Royal, Regent Street, W.).—7 for 7.30 p.m.: Annual Dinner.

NORTH LONDON MEDICAL AND CHIRURGICAL SOCIETY (Board Room of the Great Northern Central Hospital, Holloway Road, N.).—9 p.m.: Clinical Evening.

MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22 Chancery Street, W.).—4 p.m.: Sir Jonathan Hutchinson: Clinique (Surgical). 5.15 p.m.: Lecture: Dr. L. Smith: The Treatment of a Failing Heart.

NORTH-EAST LONDON POST-GRADUATE COLLEGE (Prince of Wales's General Hospital, Tottenham, N.).—2.30 p.m.: Gynecological Operations (Dr. A. E. Giles). Clinics: Medical Out-patient

(Dr. A. J. Whiting); Surgical Out-patient (Mr. Carson). 3 p.m.: Medical In-patient (Dr. G. P. Chappel).

### FRIDAY, NOVEMBER 12TH.

ST. JOHN'S HOSPITAL FOR DISEASES OF THE SKIN (Leicester Square, W.C.).—6 p.m.: Chesterfield: Lecture: Syphilis (continued): Papular (I., Miliary; II., Lenticular; III., Squamous; IV., Moist), Pustular and Tuberculous.

ROYAL SOCIETY OF MEDICINE (CLINICAL SECTION) (20 Hanover Square, W.).—8 p.m.: Cases will be shown by Mr. A. Pearce Gould, Dr. Lunn, Dr. Rolleston, Dr. Galloway, Dr. T. D. Savill, Dr. Poynton, Dr. Salusbury McNalty. Report: Mr. A. Carless: Intestinal Concretion (shown at last meeting). Papers: Dr. Gifford Nash: Primary Hyperplastic Tuberculosis of the Stomach and Duodenum. Dr. Hale White, Dr. Bruce-Porter, and Mr. Lockhart Mummery: A Case of Pneumococcal Colitis with Hyperpyrexia, Severe Hemorrhage treated by Appendicectomy.

MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22 Chancery Street, W.).—4 p.m.: Dr. H. Tilley: Clinique (Ear, Nose, and Throat).

NORTH-EAST LONDON POST-GRADUATE COLLEGE (Prince of Wales's General Hospital, Tottenham, N.).—10 a.m.: Clinic: Surgical Out-patient (Mr. H. Evans). 2.30 p.m.: Operations Clinics: Medical Out-patient (Dr. A. G. Auld); Eye (Mr. R. P. Brooks). 3 p.m.: Medical In-patient (Dr. R. M. Leslie).

CENTRAL LONDON THROAT AND EAR HOSPITAL (Gray's Inn Road, W.C.).—3.45 p.m.: Lecture: Dr. A. Wylie: Larynx.

### MONDAY, NOVEMBER 15TH.

MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22 Chancery Street, W.C.).—4 p.m.: Dr. James Galloway: Clinique (Medical). 5.15 p.m.: Dr. J. L. Bunoh: "Tubercular Diseases of the Skin, and their Treatment."

### TUESDAY, NOVEMBER 16TH.

MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22 Chancery Street, W.C.).—4 p.m.: Dr. C. Theodore Williams: Clinique (Medical). 5.15 p.m.: Dr. Wardrop Griffiths (Leeds): "On Some Cases and Specimens of Unusual Diseases of the Heart."

CENTRAL LONDON THROAT AND EAR HOSPITAL (Gray's Inn Road, W.C.).—3.45 p.m.: Dr. J. Atkinson: Nose.

## Appointments.

BLACKWOOD, WILLIAM, M.B., Ch.B. Edin., Honorary Medical Officer to the Camborne (Cornwall) Dispensary.

CLARKE, HENRY J., jun., M.B., B.C. Cantab., M.R.C.S., L.R.C.P. Lond., Honorary Surgeon to the Doncaster Royal Infirmary.

DOCKRAY, J. S., M.D., Ch.B. Viet., Certifying Surgeon under the Factory and Workshop Act for the Bishop Stortford District of the county of Hertford.

FLETCHER, H. N., M.B., B.S. Edin., Senior Assistant Surgeon to the Sussex County Hospital.

HOARE, EDWARD F., M.D., Ch.B., L.S.A., Honorary Assistant Surgeon to the Cancer and Skin Hospital, Liverpool.

McLAREN, MAUD V. EVERETT, L.R.C.P. and S. Edin., L.F.P.S. Glasg., Part-time Medical Officer to the School Board of Glasgow.

POOLEY, GEORGE H., F.R.C.S. Eng. and Edin., Lecturer in Ophthalmology in the University of Sheffield.

THOMAS, JOSIAH TELFER, L.R.C.P. Lond., M.R.C.S., Medical Officer to the Camborne (Cornwall) Dispensary.

VERRALL, T. J., M.R.C.S., L.R.C.P. Lond., Honorary Consulting Surgeon to the Sussex County Hospital.

## Vacancies.

The Hospital for Sick Children, Great Ormond Street, London, W.C.—Fourth Anesthetist. Honorarium of £15 15s. voted on the expiration of each year of office. The sum of £6 6s. is also voted to provide a substitute during three weeks in the summer. Applications to the Secretary.

Kent County Asylum, Chatham.—Third Assistant Medical Officer. Salary £145 per annum, with board, quarters, attendance, and washing. Applications to Medical Superintendent, Chatham, near Canterbury.

Nottingham General Dispensary.—Assistant Resident Surgeon. Salary £160, with apartments (not board), attendance, light, fuel. Applications to G. Cheeseman, Secretary, 12, Low Pavement, Nottingham.

Nottingham General Dispensary.—Resident Surgeon. Salary £180. With apartments (not board), attendance, light, and fuel. Applications to C. Cheeseman, Secretary, 12, Low Pavement, Nottingham.

City of Birmingham.—Salterley Grange Sanatorium for Consumptives, near Cheltenham.—Medical Superintendent. Salary £250 per annum, with board. Applications to the Chairman of the Health Committee, Council House, Birmingham.

## Births.

DENNY.—On November 4th, at R.N. Hospital, Cape of Good Hope, the wife of Staff-Surgeon H. R. H. Denny, R.N.—a son.

## Marriages.

ALLEN—CRONIN.—November 6th, in London, Samuel Carson Allen, fourth son of the late David Allen, J.P., Belfast, to Carrie, only daughter of the late John Cronyn, M.D., Dublin.

WALKER—LE BRETON.—On November 4th, at All Souls' Church, Langham Place, London, Robert Wynne Stanley Walker, M.B., B.C., youngest son of Theodore Walker, Glenn Hall, Leicestershire, to Alice May, only daughter of C. M. le Breton, K.C.

# THE MEDICAL PRESS AND CIRCULAR.

"SALUS POPULI SUPREMA LEX."

VOL. CXXXIX.

WEDNESDAY, NOVEMBER 17, 1909.

No. 20.

## NOTES AND COMMENTS.

### Another Martyr to Medicine.

A FEW weeks ago it was our privilege to comment in these columns on the distinguished bravery of a South Wales colliery surgeon. This week it falls to our lot to record the death of another of our colleagues who sacrificed his life in a less dramatic way, it is true, than that of leading a forlorn hope through the bowels of the earth, but none the less surely was it laid down freely before the altar of duty. The name of Dr. John Herbert Wells is now added to the long list of medical men who have laid down their lives in the cause of humanity. For some years past he had been engaged in special research work at the St. Mary's Hospital laboratories. He had specially devoted himself to the study of glanders, and, we believe, actually achieved successful results in the case of one patient. Unhappily, he himself contracted the disease, and after eighteen months' suffering, has died, at the early age of thirty years. He has left behind him a widow and two small children, on whose behalf a fund has been started. Contributions will be acknowledged by the *Lancet* or by the honorary secretaries, Lord Dalhousie, or Mr. Julian Lousada, at 18 Old Broad Street. There should be no difficulty in securing an ample public recognition of the splendid self-sacrificing altruism shown by the late Dr. John Herbert Wells.

### The Regulation of Vice.

THE Manchester and District Society for the Abolition of the State Regulation of Vice, at their recent annual meeting, asked a few pertinent questions and advanced certain views that smacked of fine old mediæval intolerance at its prime. To purists of this kind "vice" means one thing only, and that is sexual indulgence, apart from marital relationship. The secretary, a clergyman, raised the important question whether England, which did not allow of State regulation of vice in her garrison towns at home, should nevertheless adopt that principle abroad in the military stations of South Africa, India, and other British settlements. That problem has vexed other than clerical brains. Years ago—when a salutary British law attempted to control one of the most deadly of the infectious diseases that afflict our home society—the Government of the time was weak enough to abolish the Act, with the result that venereal disease has since been unrestrainedly at work, like the deadly leaven that it is, among all classes of the United Kingdom. Another point that stirred up still warmer resentment in the mind of the reverend secretary were the experiments of Neisser and Metchnikoff in the endeavour to establish immunity against syphilis, or, as the society with the long name

prefers to speak of it, the "fruits of vice." The chairman took up the story, and emphatically condemned the suggestion that schoolboys should be compulsorily vaccinated against syphilis, as they are now against small-pox. That suggestion, however, appears to be as far in front of the times as the views of the Manchester society lag behind what we perhaps speak of as the collective common-sense morality of the nation. However, it is never likely to come on the stage of practical politics, as it may be confidently anticipated that syphilis will be eradicated within the course of a few generations.

### Syphilis an Incurable Disease.

THE fact is that the views of these amiable, but narrow, apostles of virtue are based on faulty data and illogical reasoning. The chairman, for instance, spoke of syphilis as an "incurable" disease. Now, if there be one triumph of modern scientific medicine greater than another it is that which demonstrated the complete curability of syphilis. Yet the speaker held it up as a terrible infection, "the milder equivalent of which might pollute the blood of the nation." Surely that is a strong argument for attempting to check its spread, as we have done in the case of other specific infective maladies. The attitude of the society appears to be that it is wrong to attempt to stop the spread of venereal diseases, regardless of the havoc they spread through society. The implication is that those who contract specific diseases through sexual indulgence should drain their cup of punishment to the last bitter dregs with one hand, while with the other they sternly ward off the ministration of curative medicine. Incidentally, no government, from their standpoint, is warranted in attempting to regulate or restrict in any way the methods of indulgence in the Circe cup. The unhappy fact is that the brunt of the "punishment" falls upon the innocent persons, wives and children, who are secondarily infected. Could any member of the society explain how a man deserved syphilis contracted from drinking from a tumbler infected by a soldier who had picked up the disease in the Antipodes? Possibly the society may crack this hard nut at their next annual meeting!

### "Dr." Walford Bodie.

NEMESIS of a kind popular in the backwoods has followed hard on the heels of the recent exposure of the methods adopted by the so-called "Doctor" Bodie in the law courts. That well-known music-hall irregular practitioner of medicine admitted in the witness-box that the meaning attached to the letters M.D. after his name was "Merry Devil"—nothing more and

nothing less. However passable this may be as a music-hall quip, it is not likely to save any man's bacon in a higher court of law—although from long experience it would be impossible to predicate what view a magistrate might take if asked to adjudicate upon the joke under Section 40 of the Medical Act, 1888. Medical men, it must be admitted, are much to blame for their want of defensive organisation and their indifference to music-hall and other unqualified trespassers. Medical students, on the other hand, still live in some association with each other, and do not shrink from applying the rough-and-ready methods of border justice. In this way the Glasgow students last Thursday took possession of the Glasgow Coliseum, and saluted "Dr." Bodie when he came on the stage with a fusillade of eggs, bananas and other missiles. Bodie fled, the stage was stormed, the police for the moment ousted, and the leader of the students induced Bodie to appear and publicly apologise for having called them "beggarly Carnegie students from Gilmorhill." Bodie was warned never to appear again in Glasgow, and the "1,400 infuriated students," as they are termed in one London newspaper, left the building quietly. We are sorry we cannot for one moment countenance these unruly proceedings.

**The Queen Alexandra Sanatorium at Davos.** THE new sanatorium at Davos for British consumptives, which has been built under the patronage of Her Majesty Queen Alexandra, and is permitted to bear her name, has been built of stone from the neighbourhood of the site, with ferro-concrete floors, roof, staircases, and balconies. The walls of the foundations, cellars, and basements are of immense thickness, and the main walls are nowhere less than 2 ft. The building is situate close to Davos Platz, on the mountain side, about 300 ft. above the town of Davos, whence it is reached by an approach road about a kilometre in length. It faces about S.S.W., and commands a charming view of the valley and mountains. The pine forest stretches almost to the doors, and affords a variety of sheltered and accessible walks. The sanatorium contains accommodation for 54 patients; but the public rooms, kitchens, cellars, and store rooms have been planned for the requirements of 120, and the building can be enlarged to afford more bedrooms if such a course should become desirable in future. A new feature of the construction is that each patient will have a separate room, divided from others by a substantial stone wall; and it is, perhaps, only those who have had experience of a sanatorium, from a patient's point of view, who will fully appreciate the increased comfort afforded by this arrangement. The extra work involved has added largely to the cost; but the managers are convinced that the results will be of commensurate value.

## LEADING ARTICLES.

### EUGENICS AND PAUPERISM.

THERE are many obstacles, social and intellectual, in the path of the scientific breeding of mankind. Hitherto the evolution of man has been for the most part left to the operation of natural laws, thus the full meaning and extent of which are as yet imperfectly understood. Nor is it likely that mankind will readily abandon the fixed prejudices and beliefs that have created the present system of society whereby and wherein his race is propagated. On the other hand, many persons will be found ready

to assent to the proposition that on abstract grounds it would be well were mankind to take in hand the control of the natural conditions which determine the characters of human offspring. In other words, that a method of artificial selection in the breeding of an ideally perfect race should replace, or, at any rate, profoundly modify the existing haphazard and uncontrolled forces. That, or something like it, appears to be the position of the Eugenic Society, and there is undoubtedly much to be said in its favour, however much it may run counter to orthodox and established beliefs and prejudices. It would be difficult for any candid man, however detestable to him might seem the attempt to reduce the marriage relations to a basis of calculated procreation, to deny the desirability of ridding the community of many of its burdens, of the wreckage of society to be found in its hospitals, gaols, workhouses, prisons and lunatic asylums. In ancient Sparta it was the custom to destroy all deformed, or otherwise unfit, children at birth, and a similar custom, we believe, prevails at the present day in some parts of the world. Quite recently it has been suggested, apparently in all seriousness, that a similar principle should be adopted, to a certain extent, by exterminating our adult imbeciles. The mayor of a southern town, who was responsible for advocating the euthanasia of all hopeless imbeciles, certainly was not disappointed at the storm of abuse to which he anticipated his views would give rise. The upholder of the science of eugenics takes a less assailable position when he treats the matter logically and endeavours to prevent the production of unfit offspring. Indeed, so difficult is it to reconcile the intellectual conclusions with moral convictions that we can readily conceive the follower of eugenics holding up his hands in horror at the thought of deliberately consigning his imbecile fellow creatures to the lethal chamber, while the upholder of the latter procedure would shudder at the idea of applying the principles of artificial selection to mankind. If we turn to the facts of society we find that the modern tendency is to foster to the utmost of their capacity all who are unfitted by Nature or by accident to take their part in the struggle for existence. Nay, more than that, the collective wisdom of the community has taken no effective steps to prevent the propagation of lunatic and other diseased and degenerate persons. To take an instance, it is well known that lunatics are often discharged from asylums as "cured" only to return after a few years' interval, during which they have been permitted to bring offspring into the world with the taint of insanity hanging over their heads. In such a case a clear logical process of reasoning can hardly fail to lead one to the conviction that, it being against the interests of the community to add to its potential lunatic population, asylum patients should be kept under such restrictions that would render their procreation of children impossible. Dr. Rentoul adopted the extreme attitude of advocating the sterilisation of all such persons, but it should not be beyond the wit of man to devise some method of detention that would attain the same end. The old adage about marrying in haste and repenting at leisure

contains a vast deal of condensed philosophy. Nowadays the tendency amongst the intelligent and thoughtful section of the community is to recognise more and more the fact that marriage entailed obligations, not only as regards husband and wife, but also as regards the children and the State generally. In a recent lecture on "Eugenics and Pauperism," Sir Edward Brabrook pointed out that the ill-nourished, ill-trained people of our large cities turned out of their miserable homes to marry early. They made no calculations of their responsibilities, and the results were that a numerous and degenerate progeny was brought into the world. The old rule of the survival of the fittest, said this authority, had been to a great extent repealed as the result of modern tendencies. And thus he came round to his great gospel that the breeding of human beings was a science, and that general education on eugenics was a social necessity. If their faith be founded on a rock, we have no doubt that in the fulness of time it will influence the mind of the nations. Meanwhile, the most hopeful optimist of us all must confess that there is something wrong in the scheme of society which encourages and fosters the multiplication of the hopelessly unfit and permits them to contaminate the vigour of coming generations.

#### THE RECENT HEMEL HEMPSTEAD MAN-SLAUGHTER CASE—A SEQUEL.

THE facts of the recent trial of a nurse for manslaughter at Hemel Hempstead Workhouse Infirmary will be fresh in the minds of many of our readers. Associated with an injudicious routine application of baths, several deaths occurred, and these were investigated by a coroner's inquest. An adverse verdict was returned against the nurse by the jury and she was at once arrested by the police. After somewhat prolonged judicial proceedings she was declared innocent, and accordingly discharged. Now, under ordinary circumstances this little tragedy would have become a local seven-days' wonder, and then would have quietly dropped out of existence. Possibly the Local Government Board, as the central controlling Poor-law authority, might have had their attention drawn to a fresh defect, or group of defects, in the much-abused system they are called upon to administer, and there the matter would probably have ended. Poor-law nurses have hitherto been powerless to protect themselves when subjected to harsh or unjust treatment, and have had to endure the woes and difficulties of their obscure, but responsible, position in silence. They have, indeed, shared the lot of workers who have not been able to secure for themselves the collective self-help of a trades union. Happily for the future of Poor-law nursing, there exists a protective organisation which has been called into existence within the past few years. Under the patronage of the Princess Christian, ever a kindly champion of those in need of help and encouragement, the officers of the Workhouse Nursing Association have done and are doing good work in the cause of their adoption. As regards the recent Hemel Hempstead case, they have addressed a letter to the Right. Hon.

John Burns, President of the Local Government Board, that cannot fail to attract attention by the firmness, reasonableness and moderation of its statements. With the merits of the internal administration of the Hemel Hempstead Workhouse we are not for the moment concerned. That part of the question may be safely left in the hands of the Central Authority. There is, however, a grave question affecting the administration of British justice raised by the Association. A reference to their letter, which will be found printed in full on page 535 of the present issue, will show that one person held in Hemel Hempstead the post of Clerk to the Guardians, Coroner, and Clerk to the Magistrates. Whatever the precise legal position may be with regard to the tenure of plural posts of that kind, we have little hesitation in condemning it at sight as opening the door to abuses of an obvious character. Upon the facts of the recent Hemel Hempstead case we offer no comment. The Workhouse Nursing Association do not hesitate to attribute bias to the Clerk to the Guardians, whose attention had been unfavourably drawn, they state, to the nurse concerned by her attitude on the question of the nurses' grievances. It seems clearly undesirable, any way, that he should investigate the case as Coroner. Nor do we consider that any coroner, even if permitted by the rules of his office, should sit in prolonged consultation with the jury, as the Association say they are informed he did in this instance. Nor do we agree with his action in not having a post-mortem examination made in a case involving issues of so serious a nature. In the subsequent police prosecution this man of many offices is again found playing a leading part as Clerk to the Magistrates. It is impossible to approve plurality of that kind, and the thanks of the public are due to the Association that has fearlessly drawn attention to its existence. The Association makes some pointed comments upon the appointment of Poor-law nurses to posts for which they are unfitted. As the matters raised are of significance to a large class of medical men, any future developments will be noted with interest.

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#### CURRENT TOPICS.

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##### Medical Men and Midwives' Emergency Fees.

THE medical men of Chelsea and Fulham last week met in the Fulham Town Hall to protest against the action of the local Guardians in declining to accept responsibility for the fees of medical men called in to assist midwives in emergencies. It was unanimously resolved: "That the medical practitioners of Chelsea and Fulham refuse to attend any woman in or immediately after child-birth, or in respect of some puerperal malady or affection, unless the respective Boards of Guardians of Chelsea and Fulham guarantee to pay for the attendance." This outspoken declaration of right must appeal to the sense of justice of all fair-minded citizens. Members of the medical profession have been deprived of the greater proportion of their midwifery cases, which have been handed over to the midwives. Now they are asked



to go to the aid of the midwives in difficult cases, but without any security as to the payment of their fees. The Guardians' position in the matter was placed before the meeting by a medical guardian. He said that so far there had been only fifty-seven such cases, and in only seven had the Guardians refused payment. He pointed out that the Guardians had no legal right to relieve an able-bodied man who was in work. On the other hand, it may be remarked that the Guardians have no right to employ the services of able-bodied and highly-skilled medical men unless they are prepared to remunerate them properly.

#### Memorial to Professor Cunningham

WE were glad to notice, in our last issue, the inauguration of a memorial to the late Professor Cunningham. His life-work was associated with two great universities—Edinburgh, where he spent his youth and his last years, and Dublin, where the best years of his life were passed. We have not heard whether the Northern University is taking steps to perpetuate the memory of her great son, but Dublin owes so much of her recent development to Cunningham that it is right she should not be behindhand in the expression of her piety. We are sure that not only Cunningham's pupils—for whom the cheery face and kindly words of "Dan" are among the most intimate of their student memories—but the many friends who were his colleagues in various public movements, will gladly join to perpetuate his memory. The form decided on is, we think, the form Cunningham would himself have chosen. Moreover, by a medal in the School of Physic, his name will be for ever linked with those of three of his colleagues who have left their mark on the Dublin school—Banks, Bennett and Purser—the last, we are glad to say, still with us.

#### To Anti-Vivisectionists.

THERE cannot be any doubt that during any one day of the hunting, shooting and fishing season in these islands more pain is inflicted upon animals than in all the physiological laboratories together throughout Great Britain during the whole of the year. The sportsmen who are guilty of this cruelty, although they may fully recognise the extent of the suffering they cause in pursuit of their diversions, never seem to be troubled with qualms of conscience. They take it as a matter of course, and it was amusing to notice that at a recent anti-vivisection congress the chairman was himself a well-known salmon angler, a votary of a sport which is only qualified as "good" when the fish, with a hook in gills or gullet, makes a prolonged fight for life and freedom. The spirit of the sportsman is expressed in the current issue of *Country Life*, in an article which, in passing, deals with the economy of grouse moors. In the old days, before "driving" was almost universally adopted, the birds were followed up, and most of those that had escaped wounded were soon accounted for. After a drive, however, wounded birds get away to a lingering death. These, we are told, "may or may not survive the winter; it all depends upon the gravity of their injuries and the severity of the weather." If they die

they do no harm to sport; if they survive they are apt to produce a weakling brood, and for this reason, therefore, they should be killed down. After every battue a considerable percentage of birds and ground game always escape wounded. The keepers employed by some of the noblemen who are among the most active supporters of anti-vivisection societies, could enlighten their masters as to the numbers of wounded pheasants that are discovered during the weeks following a single grand day's "sport," but it would probably be as much as their place was worth to take such a liberty.

#### Should Veronal be Scheduled?

AN alarming number of deaths from the use of veronal, either by accident or by intention, have been reported within the past few weeks. Indeed, the matter has now attained a growth that demands the serious attention of the Government. On previous occasions we have thought it desirable to ask for the scheduling of veronal as a poison by the Pharmaceutical Society. Several of the fatalities have been due to the taking of the drug in pellet form, and most medical men must deprecate the sale of so dangerous a substance in the amounts usually contained in the bottles sent out by the manufacturers. This point may be advanced with confidence so far as the high-class firms from which these particular remedies emanate are concerned. They have only to become acquainted with the dangerous results of offering to the public those particular wares in that particular form to put an immediate stop to their sale. In a recent veronal case at Cardiff the Coroner said he thought there should be some legislation which, without interfering with the legitimate trade of the chemist, should form a protection for the public, whereby these things should not be so easily obtained. On this the jury promptly added a rider to their verdict, calling the attention of the Home Secretary to the need for special legislation. The ideal method were it attainable, would be to forbid absolutely the sale of all deadly drugs, except upon the responsible order of a duly qualified medical man.

#### The "Note" System in Hospitals.

THE moot question of the desirability of the system of "notes" or "letters" of admission to hospitals seems as far from settlement as ever. There can be little doubt that in many instances it inflicts a hardship upon the deserving sick poor, who are put to great trouble and inconvenience in the effort to obtain these recommendations. On the other hand, those who are charged with the heavy responsibility of finding the funds necessary for the support of the voluntary medical charities recognise in this system a valuable attraction to subscribers by offering them patronage of a kind that is often useful and the exercise of which maintains their interest in the particular hospital to which they have given their support. But there need be little hesitation in condemning a modification of the "note" system recently adopted by the West Bromwich and Wednesbury Hospital Saturday Committee. It appears that the local hospital, like many others, is at present staggering under a burden of debt, and handed a supply of notes to the Saturday Committee. The latter determined,

so far as can be gathered from the newspaper report at hand, to limit their notes to workpeople employed at works that have contributed to the Hospital Saturday Fund collections. This is making a lever of a purely voluntary collecting and distributing agency that we venture to affirm was never contemplated by its founders. It is, in point of fact, a covert pay system, inasmuch as the payment of money to the Saturday Fund is made an essential condition of relief. The proposal, to a certain extent, undermines the principle that should dominate the conduct of a voluntary medical charity carried on in the interest of the public.

### The County Medical Officer of Health.

BE the merits or demerits of the present Government what they may, there is little doubt that the effort to protect the position of the county medical officer of health demands the gratitude of the medical profession. In the original Bill for town planning, section 68, sub-section 5, reads: "A medical officer of health for a county shall be removable by the county council with the consent of the Local Government Board, and not otherwise." In the House of Lords the section eventually became number 70, but sub-section 5 still remained as above, but apparently on the ground that the rights of the county councils were being invaded, the sub-section was deleted. It has been replaced by the Commons, but in the course of the debate an endeavour was made to represent the case as a battle between the trade union of the doctors and of the landlords. It would be somewhat difficult to find complete justification for such a view. The truth seems to be that a strong, capable and independent medical officer is as much a necessity to the county as the land itself, and the legislature that adopts any other view is likely to be ploughing the sands, so far as the next generation is concerned.

## PERSONAL.

THE KING has been pleased, on the recommendation of the Secretary for Scotland, to approve the appointment of Sir Thomas Mason to be Chairman of the General Board of Lunacy for Scotland in succession to the Hon. Walter George Hepburne Scott, Master of Polwarth.

Dr. H. S. Lowe's name appears in the list of nominations for Sheriff of Anglesey.

A ROYAL Medal has been presented to Major Ronald Ross, F.R.S., for his researches in connection with malaria.

ONE of the new Knights is Mr. James Matthew Moody, L.R.C.P. Edin., M.R.C.S. Eng., superintendent of Cane Hill Asylum.

MR. C. O'NEILL, M.D., M.Ch., M.A.O.R.U.I., has been elected a Member of Parliament for the South Division of Armagh, Ireland.

WE deeply regret to announce the death of Mr. H. H. Clutton, senior surgeon to St. Thomas's Hospital, which occurred on Tuesday last.

IN answer to many inquiries, we are glad to say that our Editor, Dr. D. Walsh, has almost recovered from the effects of his street accident on November 1st.

MISS ANNIE FLETCHER has received the decoration of the Royal Red Cross in recognition of devoted service rendered by her to Their Majesties the King and Queen since 1902.

SIR DONALD MACALISTER, K.C.B., President of the General Medical Council, will take the chair at the next session, in London, on Tuesday, November 23rd, at 2 p.m.

MR. R. HENSLOWE WELLINGTON delivered a lecture upon Forensic Medicine and Coroner's Law on Wednesday last before the North-East London Post-Graduate College.

WE regret to announce the death, on Saturday last, of Sir William Thomson, C.B., Honorary Surgeon to the King in Ireland, and Senior Surgeon to the Richmond Hospital.

MR. JAMES AUGUSTINE HARAN, M.D. Dub., medical officer of health at Mombasa in the East Africa Protectorate, has been made a Companion of the Most Distinguished Order of St. Michael and St. George.

MR. GEORGE HERBERT POLLARD, M.P., M.D., C.M. Edin., has received a knighthood. He is a barrister-at-law of the Inner Temple, and has been a member of the Eccles Division of Lancashire since 1906.

ON Saturday last Dr. F. Womack, professor of physics at St. Bartholomew's Hospital, formally opened the new observatory and meteorological station which has been erected near the summit of Hampstead Heath.

AT St. Stephens-in-Brannel, Cornwall, Mr. Donald Moore Barry, L.F.P.S., L.M. Glas., L.S.A. Lond., was recently presented with a case of pipes from the members of the local branch of the St. John Ambulance Association.

As a sequel of the mysterious disappearance of Dr. May from the town for the last two or three weeks, the Aston Board of Guardians have resolved to remove his name from the medical officership of No. 4 District.

WE regret to learn that Mr. H. W. Cox, one of the early workers in X-rays, and a well-known maker of apparatus, has undergone an amputation of the forearm. It will be remembered that Mr. Cox recently received a grant from the Government.

THE testimonial to the late Dr. John Herbert Wells, who died from glanders contracted during experimental research work, is being raised by a committee consisting of Mr. Balfour, Lord Dalhousie, Lord Justice Fletcher Moulton, Sir Almroth Wright, and others. Donations to be sent to the *Lancet*, or to the Hon. Secretaries, 16 Old Bond Street, London, E.C.

THE following have been elected Medical Mayors:—Mrs. E. Garrett Anderson, M.D. Paris, L.S.A. (re-elected); Mr. Edward F. Chinery, F.R.C.S. Edin., L.R.C.P. Edin., M.R.C.S. Eng.; Mr. F. H. Appleby, M.R.C.S. Eng., L.S.A.; Mr. R. de la Poer Beresford, M.D. Glas., L.R.C.P., L.R.C.S. Edin., L.R.C.P. Lond.; Mr. E. H. Lipscombe, M.B., B.C. Cantab., M.R.C.S. Eng., L.R.C.P. Lond.; Mr. J. Grout, L.R.C.P. and S. Edin., L.F.P.S. Glas.

THE following members of the medical profession have been elected as Councillors on the London Borough Councils (the list may be incomplete):—Camberwell, Mr. F. Lonnon and Dr. D. M. Serjeant; Finsbury, Mr. W. Lauzun-Brown; Fulham, Mr. J. J. Edwards; Hampstead, Mr. C. W. Cunningham; Islington, Dr. G. Madden and Dr. Kate Haslam; Kensington, Dr. F. H. Anderson and Dr. F. H. Alderson; Paddington, Dr. J. Thoresby Jones; St. Pancras, Dr. R. M. Beaton and Dr. Paramore; Stepney, Dr. Stanley B. Atkinson, J.P., and Mr. M. Feldman; and Westminster, Dr. Henry Dutch.

# A CLINICAL LECTURE

## ON

### VACCINE TREATMENT IN GENERAL PRACTICE.

By ROBERT J. ROWLETTE, M.D.,

Pathologist to Dr. Steevens' Hospital, and to the Rotunda Hospital, Dublin.

I WISH in the present lecture to direct attention to certain methods of treatment which have so directly sprung from work in bacteriological laboratories that they are still left to a considerable extent in the hands of professed bacteriological workers. It is the tendency, however, with regard to all therapeutic discoveries of real utility that they should not remain to be practised only by a certain class of the profession, but should, as time goes on, come into the hands of the rank and file for use in their everyday work. I wish, therefore, to discuss the manner in which the discoveries of vaccine treatment can be applied to some of the common diseases which are dealt with by the general practitioner.

I am not concerned at present to discuss the principles on which vaccine therapy is based. Suffice it to say that by the inoculation of the virus of an infective disease, in suitable dose, we have it in our power to raise the resisting power of the patient toward the particular disease. This is the principle applied for the last hundred years in vaccination for small-pox, but recently it has found much wider application. At present it is applied in the treatment of infective diseases of all sorts where the infection is localised, and is also applied in the prevention of general infective diseases.

The vaccine employed is in most cases a killed emulsion of the causal organism in salt solution, though in the case of tuberculosis, Koch's Tuberculin R. is frequently employed. Let us apply these few general remarks to some of the more common infective diseases of a local nature.

In the first place, I give you particulars of a case of acne. The patient, a student of about 22 years of age, has been troubled with acne spots for many years. He was never entirely without them on his face and back, and at times such a conspicuous crop appeared on his face that he avoided going into ordinary society. This gentleman was given one dose of mixed *staphylococcus aureus* and *albus* vaccine, with the result that the spots almost entirely disappeared. In a few weeks a few spots again began to appear, but a second injection cut them short. At intervals of three or four months he still requires injections, as one or two spots come out on his back, but never has his face again been troubled. This is a typical history of a case.

You will note that I do not mention that any culture was made to discover the causal organism in this case. This omission was, in the first instance, made because the case was urgent, and I felt justified in employing as vaccine the organisms experience has found to be most closely associated with acne. As the vaccine proved immediately successful, cultures were not deemed necessary.

If we may often expect results such as were obtained in the case just sketched, we have obviously at our disposal a mode of treatment of great utility, since all previous methods of treatment of acne were highly unsatisfactory. In my experience we have in vaccine-therapy a mode of treatment always followed by good results in acne, and particularly is the good result marked in the worst cases of the disease.

How, then, should one deal with a case of acne presented for treatment? Two plans are open to us—to cultivate the germ from the pustules, and give a vaccine of that germ, or to give at once, as in the above case, a mixed vaccine on chance. The former is the more strictly scientific method, the latter more haphazard. If the stock vaccine of mixed *Staphy-*

*lococci* be successful, then some time is saved, and therefore, at present, I adopt both courses provisionally. When I see a patient suffering from pustular acne, I take cultures in order to separate the causal organism, but, at the same time, without waiting for the result of the cultures, I give a small dose (250,000,000 cocci) of mixed *staphylococcal* vaccine. (a)

When the cultures have had the necessary time to grow, and the organism has been separated, then a vaccine of that organism should be given for the second inoculation.

A question here arises as to whether it is permissible to use a stock vaccine, or is it necessary in every case to have a vaccine prepared from the strain actually cultivated from the patient? I have no doubt that the latter method will give greater success, but there may be difficulties in applying it in the exigencies of general practice. If it is possible to prepare a vaccine, and if your patient can afford to pay for having it done, then by all means have a vaccine prepared. If not, on satisfying yourself of the organism present—and here it may be necessary to have the help of a bacteriologist—administer a dose of the stock vaccine. At the end of ten days or a fortnight a second dose, double that of the first, may be given, and doses repeated at similar intervals until a cure is effected. In many cases three or four inoculations are sufficient, but it may be necessary for the maintenance of health to give an occasional dose afterward at longer intervals.

There may, however, be indications which render a cessation or modification of the treatment advisable. If any marked local pain or swelling occur at the seat of inoculation, the dose is probably too large, and treatment should be stopped for a few weeks. On resuming, a dose one-fifth of that previously employed is advisable. Again, if fever or general malaise follow an injection, or if exacerbation of the symptoms of the disease occur, the dose is too large. Having once found the dose which suits a particular patient, it is rare that in the course of treatment alteration of that dose is found necessary. In the treatment of women it is advisable to avoid the period of menstruation in giving inoculations. These remarks apply to other infections of which I have to speak presently.

Other cases of local *staphylococcal* infection beside acne occur. For instance, here are particulars of a case treated last year:—A gentleman, a dentist by profession, received a blow of a hockey stick on one of the finger-nails in December, 1907. The nail was broken, and profuse suppuration occurred. His face next became infected, and several small, suppurating patches appeared. Every minute scratch was infected, and several scabs formed, rendering his face unsightly, thus interfering with the practice of his profession. This was his condition when I first saw him some months after the first infection. His finger had just healed. Cultures were made from the sores on the face, and a pure culture of *staphylococcus aureus* obtained. A dose of 250,000,000 cocci of stock vaccine was administered. Within a few days he telephoned to me that he was much better, and when I saw him I found that no fresh spots were appearing, and that the sores were looking clean and apparently healing rapidly. He received a second dose, and a few days later his face had quite healed up, and he has remained quite well since.

Many similar cases are easily and successfully

(a) These stock vaccines are on the market as prepared by several reputable firms.

treated in this manner, as, for example, otorrhœa, surgical wounds which have failed to heal, boils and carbuncles, syphilis, and occasionally gleet. The two cases I have related are sufficiently typical examples of staphylococcal infections.

With regard to streptococcal infections, we find that vaccine-therapy is not employed with quite the same ease as in staphylococcal, since streptococcal infections have a greater tendency to be acute, and vaccines have to be used with more caution in acute than in chronic cases. In erysipelas, however, when it has passed the most acute stage, in protracted septicæmia, particularly of puerperal origin, and in periostitis and endocarditis, treatment by vaccines has given excellent results. In streptococcal cases, however, it is more requisite than in others to have a vaccine prepared from the patient's own strain of organism, since there is greater variety between the different strains of streptococcus than in the case of most other organisms. In the very acute stage of a streptococcal infection, the use of a vaccine is probably not without risk, though it is much more to be justified than is that of the so-called antistreptococcic sera. The initial dose of streptococcal vaccine most commonly found suitable is 5,000,000 cocci.

The form of *bacillus coli communis* infection most frequently met by the general practitioner is probably cystitis, particularly that following the habitual use of the catheter. In cases of cystitis, it is advisable to have the urine examined by a bacteriologist in order to discover the causal organism. Most commonly it is the *bacillus coli*, though sometimes it may be one or other of the staphylococci. The organism being discovered, the treatment is simple, and the prospects are usually good.

Gonorrhœa is another of the common diseases in which the vaccine treatment promises good results. The treatment should not be begun till the acute stage has begun to subside. A dose of 75,000,000 cocci is then given. After ten days double that amount may be given, and further inoculations at similar intervals for a further four or six weeks.

Many cases of gonorrhœa, however, only apply for treatment when the discharge has gone on for many months. Such cases of gleet are notoriously hard to cure by ordinary means. In many cases, too, they resist gonococcal vaccines, and this is due to the fact that the urethra has become the seat of secondary infection by other germs, most frequently the *staphylococcus albus* and *citreus*. In cases, therefore, which are not benefited by gonococcal vaccine, it is advisable to administer a mixture of *staphylococcus albus* and *citreus*. If the first few injections of this are not followed by any improvement, then it is necessary to have cultures made from the urethral discharge. Vaccines from these commonly give good results.

It will be seen that the chief difficulty in treating the urethritis of gonorrhœa arises from the fact that the gonococcus is rarely the only organism present. In certain complications of gonorrhœa, however, we have a pure infection by the gonococcus, and in them vaccine treatment gives the most satisfactory results. The most important of these is urethritis, and in the treatment of this condition one can prophesy speedy cure almost with certainty. Usually two or three injections are sufficient.

The diplococcus of pneumonia is a cause of very varied and widely distributed lesions in the body. Peritonitis, localised puerperal sepsis, superficial abscesses, are among its results. In all such local lesions, treatment by a vaccine of the diplococcus is most beneficial. In the case of acute pneumonia, we are hardly in a position as yet to apply this form of treatment, though in unresolved pneumonia it has been applied with success.

We are left with perhaps the most common and the most important disease—tuberculosis. The variety of its forms naturally make the subject of vaccine treatment one of special complexity.

The most deadly form of tuberculosis is, of course, that which attacks the lungs, and it is precisely here that we are most in the dark as to the conditions under which vaccine treatment is suitable or helpful. Speaking generally, phthisis is the form of tuberculosis in which the treatment has been least successful. This is probably due to the fact that when it has come

under treatment the disease is already considerably advanced. Calls have been made on the reaction of the patient, and it is only when this reaction has failed that the disease has progressed. Now this is precisely the opposite condition to those that are favourable for vaccine treatment. Vaccine treatment is most successful where the disease is so localised that it has failed to call out the reactive powers of the body. To use a figure of speech, we have in local lesions, such as furuncle or lupus, a condition resembling that brought about if a very small foreign force were to effect a landing in some remote point of the coast, and were to remain there unnoticed, ineffective, and entrenched behind strong walls. Their very insignificance is their security. But let the alarm be given, and the posses raised, and the invader is driven into the sea. It is different, however, if the invader has come in such force as to gain possession of the seat of the government and the heart of the country. There is no use in now giving the alarm, or lighting the beacon fire. The country's forces have fought and been vanquished, and any attempt to raise them again only leads to reprisals, murders, executions, and the speedy extinction of the life of the country.

Now, most cases of pulmonary tuberculosis when seen have already arrived at this stage. We find, therefore, that in them vaccine treatment is of little avail, and if persisted in against indications, it may do injury. Nevertheless, in early cases, where the lesion is small, the treatment sometimes is highly useful. It is well, therefore, to try it, but, apart from opsonic estimations, careful attention must be given to the temperature, pulse, and general clinical conditions, and if any ill effect follow, the treatment should cease or the dose be diminished.

In other forms of chronic tuberculosis the matter is simple, and I know none, except, perhaps, nephritis, in which vaccine treatment does not give encouraging results. In lupus, in tuberculous glands, in tuberculous joints, in tuberculosis of bones, in cystitis, in peritonitis, the effect is usually satisfactory, and sometimes startling in its success. Let me recount a case or two:—(1) A girl, æt. 23, had been suffering for some months from tubercular cystitis. She had failed rapidly in health, had incessant and severe pain, and was passing much pus in her urine. The pus contained enormous numbers of tubercle bacilli, every field of the microscope showing several. Her opsonic index was .6. An injection of 1/1000 mg. solid substance T.R. was given. In a few days her index had risen to 1.4, her pain had become much less, and the urine contained only a little pus. An injection of 1/500 mg. was given ten days after the first, and another a fortnight later. Under this treatment the index was found above 1.2 on the several occasions when it was estimated. Her pain entirely ceased, and the pus and tubercle bacilli disappeared from the urine. Unfortunately, the girl could not remain under treatment, and she returned to the country. I heard some twelve months later that she died of the disease. (2) A woman, æt. 35, was suffering from tubercular salpingitis and peritonitis. She was a patient of my colleague, Dr. Jellett, who opened the abdomen in January, 1906. He found the tubes so extensively diseased, and the tuberculosis so general and so advanced, that he did not remove anything, but closed the abdomen. Some weeks later he sent her to me for vaccine treatment. When I saw her in February, 1906, I thought her so ill that I was loth to attempt any treatment. She was emaciated in the extreme, very weak, and very ill. An injection of 1/1000 mg. was given, and followed in a fortnight by one of 1/500. She remained under treatment until November, getting injections at first every fortnight, and afterwards, owing to her living in the country, every month. In October neither Dr. Jellett nor I could find any trace of disease, and she professed herself in perfect health. She had increased in weight by two stone and a-half. Her health was so good that she ceased treatment and got married.

In other cases one sees remarkable improvement in scrofulous glands, in tuberculosis of bones and joints. Of one instance of the latter I will recall the main features. A young girl, æt. 15, developed signs of

tuberculosis of the knee-joint. She was put to bed, and given injections of tuberculin. After two months' treatment a small piece of dead bone the size of a pea was extruded. The aperture speedily healed up, and in another two months the girl had completely recovered. She has now remained well for two years.

In what I have said I have endeavoured to make clear to you that in vaccine treatment we have a method easily applied, requiring no special skill beyond what experience and careful observation can give any medical man, a safe method, and one fraught with great possibilities in many varieties of infective conditions. I have avoided mention of conditions whose treatment requires special bacteriological skill other than what can be easily obtained, and in particular I have not advised the estimation of the opsonic index. I believe that the estimation of the opsonic index is a considerable aid both in diagnosis and treatment, but I have tried to show that much good may be done without reliance on it, in the treatment of many infective conditions.

NOTE.—A Clinical Lecture by a well-known teacher appears in each number of this journal. The lecture for next week will be by F. J. Smith, M.D., Physician, London Hospital. Subject: "The Examination of the Person."

## BRADSHAW LECTURE.

### DARWINISM AND MEDICINE. (a)

By JAMES ALEXANDER LINDSAY, M.A., M.D.,  
F.R.C.P.,

Professor of Medicine in the Queen's University of Belfast, Physician to the Royal Victoria Hospital, Belfast.

#### PART II.

*Darwinism and Disease.*—What light can evolution throw upon disease, upon its origin and course, upon the response of the organism to its assault, upon immunity and proclivity, upon the principles and results of treatment? On all these heads something might be said, but the issues thus raised are too far-reaching to be adequately dealt with on the present occasion.

An inquiry into the origin of disease in the biological sense may well seem futile. How the first bacillus of tubercle or the first *plasmidium* of malaria came into being may be regarded as a problem as mysterious and as futile as the origin of matter or the origin of life, questions which Darwin always refused to discuss. "It is mere rubbish," he says in one of his letters, "thinking at present of the origin of life: one might as well think of the origin of matter." Yet the origin of life has provoked many speculations, inconclusive, but not absolutely vain and sterile. The origin of a morbid micro-organism can be only dimly surmised, but evolution may help us to understand how such organisms have acquired their potency for mischief. In some cases, e.g., tuberculosis, there is reason to believe that civilisation and the habits of civilised man have had much to do in conferring toxicity upon an organism comparatively innocuous under more primitive conditions of existence. Many facts of bacteriology suggest to us that organisms such as the pathogenic bacteria owe a large part of their virulence not so much, as it were, to their inherent properties as to certain conditions of growth which are only very partially known to us. If this view be sound, it will follow as an obvious corollary that tuberculosis is to be suppressed, not by destruction of the bacillus, but simply by depriving it of those conditions necessary for its growth and development.

Evolution may throw some light upon the different effects which the same ætiological factors are known to cause in different individuals. Over-indulgence in eating and drinking produces in one individual gout, in another cirrhosis of the liver, in a third renal disease, in a fourth arterio-sclerosis, and so on. How are we to

account for the different responses to the same stimulus? We have to assume some congenital peculiarity in the individual, the result of factors which may stretch back to a remote past, and which have been developed in accord with evolutionary laws. A similar train of reflection is suggested by the facts of immunity, a subject upon which so much brilliant work has been done in recent years. The precise mechanism of immunity, the action of phagocytes, alexins, or other protective agencies, need not be here dwelt upon. The effects of food, temperature, fatigue, of previous diseases, of protective inoculation whereby the specific protective substances have to be formed in the body itself, and of immunisation by transference of protective substances previously formed in antitoxic serum, are well known to you. What seems clear is that when full account has been taken of all secondary causes of immunity, we are thrown back upon a factor, which we may vaguely describe as "constitutional" or "congenital," or as a personal peculiarity or idiosyncrasy. Why does one individual fall a ready prey to scarlatina or diphtheria, while another resists repeated exposure to contagion? It is of great interest to learn that certain protective agencies are at work, which can be, to a certain extent, recognised. But it is clear that the recognition of such agencies only pushes the problem farther back, and does not finally solve it. That the predisposition to contract infective disease, or to resist infection, runs strongly in families is a matter of daily observation. Some people, as the saying is, "catch everything that is going," others escape though equally exposed to infection, and these peculiarities are found to characterise certain stocks and strains. Again, some persons on being infected, quickly develop all the usual consequences of infection, while others develop them slowly, or imperfectly, or even not at all. We are familiar with the fact that the bacillus of diphtheria may be present in the fauces of healthy individuals who have been in close contact with sufferers from the disease, and no further development occur. It is probable that most of us at some time or other have received the bacillus of typhoid fever into our systems, in most cases without injurious result. I may even suggest to you that some persons have tubercle bacilli in their sputum and seem very little the worse for their presence. These facts might be multiplied indefinitely, and they all point in one direction, viz., that when all the secondary agencies of immunity have been unveiled—and the inquiry into them is one of extraordinary interest and importance—we shall still be left with some unexplained factor, some congenital or hereditary element which has arisen in accord with evolutionary law. We have facts which suggest to us that civilised nations are undergoing a process of gradual immunisation to infective disease. When measles was first introduced into the Faroe Islands and the Fiji Islands, there was an enormous mortality, amounting in some cases to one quarter of the entire population, while subsequent epidemics have shown a much lessened virulence. In accounting for such facts there seem to be two possible theories:—(1) That certain inhabitants of these islands possessed a special susceptibility to the toxin of measles, or (2) that the population as a whole in some way developed an acquired immunity, of course to an incomplete extent, against the disease. The extraordinary virulence of Asiatic cholera when it first penetrated from its original home in Bengal to Europe and America is a phenomenon of the same category, while its declining severity in subsequent invasions, which is so often attributed solely to improved hygiene and greater caution regarding food and water, may really be due in part to the operation of an evolutionary law. Why are negroes so resistant to yellow fever, so susceptible to tuberculosis and small-pox? May it not be that the explanation is evolutionary, that the negro has been longer in contact with the first mentioned disease than with the remaining two, and has hence acquired a certain degree of immunity against it? Why are Anglo-Saxons in India so much more susceptible to typhoid fever than the native inhabitants? Is it because the latter, inhabiting a country where hygienic laws are so little recognised,

(a) Delivered at the Royal College of Physicians, London, on November 2nd, 1909.

have developed a considerable degree of immunity? Or, is it, as some affirm, that a large proportion of the native inhabitants suffer from mild attacks of typhoid fever in youth and hence are protected during the rest of their lives? Tuberculosis is rapidly declining amongst nearly all civilised nations. Is this exclusively the result of improved hygiene, a higher range of comfort, better houses, better food, or is it in part the effect of a gradually developing immunity? Further, it may be asked—Are the two views really incompatible one with the other? How far is an acquired immunity due to improved methods of living? Again, we may ask—Is the growing sobriety of civilised nations the result of a gradually developing immunity against the injurious effects of alcohol? Are the drunkard and the intemperate undergoing a process of slow but sure elimination?

My object is not to affirm any dogmatic opinion on these important issues, but to suggest to you that in our thinking on these matters we must take a wide and philosophic view; we must recognise that in disease great secular processes, as well as more concrete causal factors, come into view. The present generation of medical workers and observers is somewhat impatient of those conceptions of "diathesis" and "temperament," which meant so much to our predecessors. We are disposed to think that these ideas lack definiteness and concreteness, that they are too vague to be any of real utility. Yet a study of evolution in its bearing upon disease may suggest to us that these terms, vague though they are, adumbrate a great truth—viz., that in proclivity to infection and response to disease, nothing is so potent as what we vaguely call "constitution," "temperament," "hereditary tendency," and the like. We have been intent upon the "search for the microbe," a search which has already yielded brilliant results, and it is needless to say, must be continued. But the response of the organism is an element at least as important as the presence of the toxin. In the future, it may turn out that we shall be compelled to devote less attention to the seed, more attention to the soil.

Evolution is capable of throwing a flood of light upon many of the most familiar phenomena of disease. We are apt to accept these phenomena as ultimate facts, as the effects of a toxæmia or of some other obvious causal factor. But it is possible to push the analysis a little deeper, to trace the true inwardness of morbid phenomena a little farther back. Let us ask the question, How does it happen that in an ordinary case of hemiplegia the arm suffers more than the leg or the face, and in the arm, why is it the finer movements of the fingers and hand which suffer more than the coarser movements of the elbow and shoulder? It is easy to answer that the reason is anatomical and relates to the seat of injury and the distribution of fibres in the Internal Capsule, but this explanation needs itself to be explained. Here, again, we may without extravagance invoke evolutionary law to help us. The fine manipulations of the hand and fingers are in all probability the last to be acquired by the developing organism, they are the least stable acquisitions of nervous tissue, they are the first to suffer under the shock of disease. The nervous system, as it were, most easily forgets the lesson most recently learnt, just as the old man forgets the events of yesterday while he remembers those of fifty years ago. Aptitudes recently acquired in the genetic series are less ingrained, as it were, in the nervous system than those which go back to an earlier stage of development. Dr. Hughlings Jackson long ago pointed out the order of the dissolution of function in the brain when under the influence of alcohol. The first to go are the highest faculties, judgment, memory, taste. In the next stage speech becomes affected; it becomes thick and indistinct. Next the emotions are involved, the individual becomes hilarious, maudlin, or quarrelsome. Last of all, the centres of organic life, respiration, circulation, deglutition, are affected, and death may ensue. Now, this order of events is not fortuitous. The nervous functions, under the influence of a narcotic poison, undergo dissolution in a definite order, the order of develop-

ment, which corresponds to the order of complexity and specialisation. It is probable that this law will be found to have a somewhat wide application in the field of disease. General paralysis of the insane is a good case in point, the elements of character and judgment usually suffering before those of voluntary movement.

That the laws of evolution and the influence of heredity throw light on the response of the organism to disease will, I think, be generally admitted. We are not wrong in attaching weight in prognosis to any known family tendency in connection with any given case of disease. It helps us in forming some estimate of that subtle and intangible, but most potent element, what we vaguely call "the resisting power of the individual." In many cases of disease we give the first place in prognosis to what is termed "the observed tendency of the individual case." This is not a truism, though it may sound like one. Let me take an illustration. A patient presents himself with the signs and symptoms of slight incipient tubercular infiltration of one apex, and the question of prognosis arises. We know that the disease may either undergo early and complete arrest, or develop to a certain extent and then undergo regressive fibrotic change, or progress to softening and excavation, or become rapidly disseminated throughout the pulmonary area. It is quite out of our power to predict with certainty which of these events will happen, but in attempting any forecast nothing is more helpful than attention to family history on the one hand, and, on the other hand, to "the observed tendency of the individual case," which time alone can reveal. We are dealing with the power of resistance which the individual can offer to the action of the tubercular toxins, and that power is part and parcel of the individual's heredity and "constitution"—it is developmental and evolutionary.

It has been debated whether there is any such force as a "*vis medicatrix nature*." Many have regarded the existence of this force as obviously written on the face of Nature, while others have denied even its existence. Can evolution throw any light on this question? Nothing can be more certain than that Nature tends to revert to the normal. In another connection Francis Galton calls this "the law of regression towards mediocrity," in other words, the tendency is for the abnormal to disappear and for the unity of type to be preserved. Darwin thought that this law had a wide application, and was even inclined to believe that tall men often married short women, and that clever men often married silly women—Nature's unconscious protest against the abnormal and unconscious striving to preserve the unity of type. If such a law exists, we might argue without paradox that disease is the abnormal, and that on the broad grounds of evolutionary law we might expect the tendency to be to eliminate the abnormal and to return to the normal. That tendency may, of course, be too weak successfully to resist the forces in opposition to it.

*Darwinism and Race Problems.*—Let us now turn to a field where by general consent the influence of evolution has been potent. The "Survival of the Fittest"—a term first suggested by Herbert Spencer—and its correlative, the "Elimination of the Unfit," have been generally accepted as expressions which succinctly sum up the effects of the operation of Natural Selection. It is important to remember that "fittest" does not mean best, either physically or ethically. It simply means fittest for the conditions of existence in any given case, most fully adapted to the environment, best able to succeed in the struggle for existence. Evolution does not necessarily involve progress, though the general law is progression from the lower to the higher, from the less to the more specialised. "Everything depends upon adaptation," says Weismann, and Höfding reminds us that "adaptation and progress are not the same." Degeneration is as truly evolutionary as progress, the upward and the downward movement being both the result of adaptation. Further, evolution does not postulate that organs and organisms are perfectly adapted to their present



needs and conditions. They may be in process of becoming perfectly adapted. Natural Selection, Darwin reminds us, tends only to make each organic being as perfect as, or slightly more perfect than, the other inhabitants of the same area, with which it comes into competition. When competition ceases, natural selection ceases. "Natural Selection," says Hugo de Vries, "acts as a sieve; it does not single out the best variations, but it simply destroys the larger number of those which are, from some cause or other, unfit for their present environment. In this way it keeps the strains up to the required standard, and in special circumstances may even improve them." The conditions of racial efficiency as defined by the laws of evolution would seem to be the following:—

(a) The race must become progressively adapted to its environment, and by environment we mean climate, food supply, and competition in the struggle for existence.

(b) There must be competition and struggle, leading to elimination of the unfit, otherwise degeneration will take place.

(c) There must not be too much inbreeding, and each strain must be from time to time crossed by another and allied strain. To this last law there are, however, some curious exceptions.

When we compare man with the lower animals in these regards, we are at once struck with some obvious points of contrast. Man is not subject to the unrestrained operation of natural selection. He wears clothes and builds houses to protect himself from the storm and the cold. He brings food from farthest East or remotest West to make up for the deficiencies of the home supply, and he lays up stores against the day of famine. He protects the reproductive function by law and custom. He restrains the warlike instinct and keeps it within bounds. He prevents or cures disease, makes life possible for the feeble, the ailing, and the malformed, and even gives them the opportunity of propagating their kind. He cherishes the aged and enables them to prolong their days. By some of his laws—*e.g.*, the law of primogeniture—he sets the principle of natural selection at defiance. In these and other ways the ordinary usages of civilised society run counter to the operation of natural law, and it becomes an anxious question whether civilisation, in so doing, does, or does not, contain the seeds of its own dissolution. Rousseau and his school believed that civilisation involved degeneration. Evolution was not within the purview of their thought, but we cannot evade the issue: Does evolution strengthen the contention which these thinkers reached by a process of intuition, whether true or false? We hear much to-day of the degeneracy of the nation, and the existence of such degeneracy is assumed by many writers. The question is, however, one of extreme complexity. It is almost impossible to obtain the data for a just comparison as regards physical fitness between the present and preceding ages. On the one hand, the ratio of defectives, including deaf and dumb, lunatics, epileptics, paralytics, infirm, etc., is said to have increased from 5.4 per 1,000 over 15 years in 1874 to 11.6 in 1896. On the other hand, there are some encouraging facts. The average duration of life is increasing. Some of the worst scourges of the human race—tuberculosis, typhoid fever, malaria—are abating their severity; the sick-rate of our benefit societies is declining. But these facts are not irreconcilable with the possibility of physical degeneracy. In the absence of conclusive data on this crucial question we may ask whether any light is obtainable from the study of evolutionary law. Are there any analogies from plant or animal which may contain suggestion for us? Domestication amongst plants and animals is the analogue of civilisation amongst men. The effects of domestication are, however, exceedingly complex. In some animals—*e.g.*, the bear family and carnivorous birds—domestication leads to sterility; in others—*e.g.*, sheep, pigs, and barn-door fowl—domestication seems to increase fertility. Many flowers become double under cultivation and continue fertile, while other double flowers lose the power of producing seed. Some highly-bred

animals develop a marked delicacy of constitution, and become very liable to disease. In some plants an artificial increase in the richness of the soil tends to the production of wood fibre rather than of flower and seed. On the whole, the above facts do not help us. The main question remains: Does civilisation, by preserving the unfit and preventing their ruthless elimination which takes place in a state of Nature, imperil the physical integrity of the race? Our marriage customs, for example—the not uncommon conjunction of youth and beauty with age and wealth, the transmission of enfeebled constitutions, and sometimes of actual disease, from parent to child—can such things be tolerated without grave risk to the physical welfare of humanity? Is the medical profession free from serious responsibility when it preserves those whom Nature has plainly marked out for elimination, and even enables them to transmit their unfitness to their descendants? These are not extravagant or sentimental questions. They are, on the contrary, highly practical questions, and if we so often keep them out of sight, I suspect it is from an uneasy sub-consciousness that they involve painful and paralysing issues.

That civilisation runs counter to natural selection is, I think, evident. It interposes artificial barriers to the free play of those forces which in a state of Nature give the victory, both as regards personal existence and opportunity for perpetuating the species, to the strong, the brave, the fit. But it is not to be assumed without argument that civilisation is dependent upon natural selection. According to Lloyd Morgan, "natural selection has long ceased to be the dominant factor in human progress." The same view is propounded by J. B. Bury in the following passage:—"It may be said that, so far as concerns the actions and movements of men who are the subject of recorded history, physical environment has ceased to act mechanically, and, in order to effect their actions, must affect their wills first, and that this psychical character of the causal relations substantially alters the problem. . . . Most thinkers now agree that the chief clues to the growth of civilisation must be sought in the psychological sphere. Imitation, for instance, is a principle which is probably more significant for the explanation of human development than natural selection." That is the view of a historian, and it must be admitted that it contains a great deal of truth, though not the whole truth. Mankind is more dependent for its progress upon the brain of a Pasteur or a Lister, a Kelvin or a Marconi, than upon the muscles of many cricketers, footballers, or oarsmen. The puny, sickly, or deformed child, which in a state of Nature would be promptly eliminated, may possess the brain of a great discoverer, poet, or statesman. Yet physical soundness can never be ignored or deemed of small significance. If physical degeneration is going on in our midst—and who can deny the fact, however much we may differ as to the extent of the fact?—we may feel sure that it is due to some species of non-adaptation to the environment. We are inclined to attribute such degeneration as exists mainly to unwholesome surroundings, bad housing, bad air, bad food, insufficient exercise, unsuitable clothing. These factors have weight—perhaps much weight—but a study of the phenomena of evolution may well make us doubt whether they are really the heart of the problem—whether, after all, the main thing is not that we are, to a more or less extent, breeding from the wrong stock. Few men have had less reason than Darwin to retract any opinion once definitely formulated; few have been from first to last more consistent in their views; but it is clear that Darwin wavered much and wavered often as regards the weight to be assigned to external conditions, climate, food, occupation, as factors of evolution. He was at one time inclined to attribute very little weight to such conditions in comparison with natural selection; later in life he was disposed to assign greater importance to them. Some of his followers have regarded these factors as insignificant. The point is one on which I shall not attempt to pronounce, but I shall content myself with

the contention that race degeneracy, where it exists, is not to be satisfactorily explained by the operation of temporary and transitory causes, but must be sought in the most profound laws of growth and survival. Let us look at another racial problem in the light of evolutionary law—viz., infant mortality, which we are all agreed is excessive. Is infant mortality due simply to bad hygiene, unsuitable food, careless mothering, or is it in any sense the analogue of the terrific waste which we know to go on in Nature? Stand under one of our forest trees and watch the clouds of pollen which fall around. How many of these granules ever reach an ovule? In a well-known passage Tennyson tells us of the sad misgivings which the spectacle of the portentous waste in Nature excited in his breast:—

"Are God and Nature then at strife,  
That Nature lends such evil dreams?  
So careful of the type she seems,  
So careless of the single life;

"That I, considering everywhere  
Her secret meaning in her deeds,  
And finding that of fifty seeds  
She often brings but one to bear,

"I falter where I firmly trod—"

Tennyson understates the case. Nature exhibits an amazing, a sinister prodigality of increase and of destruction. A single flesh-fly, Wallace informs us, produces 20,000 larvæ, which reach their full size in five days, so that each parent fly may be increased ten-thousand-fold in a fortnight. A pair of our common birds—thrush, blackbird, sparrow, titmouse—if allowed to live and breed unmolested, would have in ten years no less than twenty millions of descendants. The machinery of destruction is, however, in a state of Nature not less efficient than the machinery of growth and increase. It is a somewhat melancholy reflection that a similar law is at work amongst mankind. We may recognise this law without proposing to acquiesce in it. In this instance, as in others, we shall find that civilisation and natural selection run counter to each other. As civilisation advances the birth-rate falls. This is, apparently, a universal law, complicated though it may be by local conditions or national habits. The birth-rate is steadily falling amongst our own nation, and even more decidedly in France and America. In the former the fall has been sufficient practically to arrest the natural increase of population. A phenomenon of this kind, apparently world-wide in its operation, and one that could not have been anticipated, must depend upon evolutionary law. Herbert Spencer is inclined to think that intellectual development and the reproductive faculty have to a certain extent an inverse ratio to each other, and that the rapid increase of the population of the world—"even slow-breeding man," Darwin tells us, "has doubled in twenty-five years"—will be arrested as civilisation develops. I cannot detain you with any of the ethical problems which such a view suggests. I must content myself with pointing out how evolution seems to be operating, how profound is its influence, and how mistaken we shall probably be if we attribute such large facts as a falling birth-rate solely to temporary and wholly preventable causes.

The relation of the medical profession to the question of the propagation and preservation of the unfit raises many difficult questions, which cannot be adequately considered on this occasion. The question of our responsibility to those who shall come after us, though not a new ethical problem—it is found in Plato—has become a practical question only in modern times. It is a principle with which we have henceforth to reckon. The art of medicine was for thousands of years concerned solely with the cure or relief of disease. At the present day the prevention of disease bulks hardly less largely in our thought, and this point of view indicates a distinct advance. In the future one may predict with confidence that the preservation of the purity of the race will be regarded as one of the essential tasks of the art of medicine. The whole

question, it is almost needless to say, is involved in the greatest difficulty, but it will certainly force itself increasingly upon our attention. It will do so with the greater insistence if we realise that the future physical well-being of the race will be determined more by natural selection than by attention to environment, important though this latter factor may be. That the medical profession will ever in this country be invested with disciplinary powers for the regulation of marriage seems doubtful. Such control would probably be foreign to the habits of mind of the British race, but we see that attempts have been made in this direction in some of the States of the American Union, and to a lesser extent in Germany, with what degree of success I am unable to say. It seems probable that in this country we shall have to rely upon the operation of an enlightened public opinion—enlightened, as it must be, to a large extent, by the influence of the medical profession.

Is the human form destined to undergo important changes in the future under the operation of evolutionary law? Are we to look for the coming of the Super-man, a conception with which the thought of Nietzsche has rendered us familiar. "What with man is the ape?" says Zarathustra. "A joke or a sore shame. Man shall be the same for Beyond-man—a joke or a sore shame." This is by no means certain. Weismann thinks it doubtful whether man may not have achieved the summit of his development, both as regards physique and intellect, and is inclined to look for progress solely in the ethical sphere. Yet some of the facts adduced in this address seem to point decisively to the conclusion that the human body is destined in the course of many generations to undergo at least minor changes. The teeth, the hairy covering of portions of the body, the toes, the special senses, are almost certain to undergo modification. Nor can we limit the probability of change to such parts as these. All we can say in this connection is that the changes which will come will be the outcome of evolutionary law. Useless organs will be eliminated. Useful organs will undergo progressive adaptation to altered conditions—such as diet, climate, habit, occupation. The possibility of reversion and of degeneration will always need to be reckoned with.

A general survey of the relations of Darwinism to the science and art of medicine is likely, I think, in many ways to be salutary. It will certainly tend to breadth of view, to a philosophic appraisement of the factors with which we have to deal, to a recognition of the great underlying laws and secular processes which are related to our art. It may, perhaps, act as a damper upon enthusiasm when we realise that evolutionary change is slow and only partially under our control, but, if this be the truth, it is better for us to know and recognise it. Medicine will gain in stability and in influence, as well as in dignity, by being in close relation with the higher thought of the day. It may, in some not unimportant particulars, react upon that thought. Disease becomes something more than a disagreeable and embarrassing fact when we realise how closely it is related to evolutionary processes, how vivid is the light it is capable of throwing upon evolutionary law. It even takes its place—a temporary place, we may hope—in the eternal order. "Harmonious order," says Huxley, "governing eternally continuous progress; the web and woof of matter and force interweaving by slow degrees, without a broken thread, the veil which lies between us and the infinite—that universe which alone we know or can know—such is the picture which science draws of the world."

THE widow of the late Herr George Speyer, of the Speyer banking house, who died in Frankfurt-on-Main a few days ago, has left from eight to ten million marks to charities. Large sums are also left for the study of lupus and cancer, to Jewish charities and hospitals, and to the pension funds of the Speyer branches in London and New York. The will further provides for contributions to the auxiliary funds for theatre, chorus, and orchestra employees, and the Journalists' and Writers' Association.

## ORIGINAL PAPERS.

THE STUDY AND TREATMENT OF  
ACUTE PERITONITIS. (a)

BY PROFESSOR FEDERMANN, M.D.,

Of Berlin.

[SPECIALLY REPORTED FOR THIS JOURNAL.]

GENTLEMEN,—In but few affections does the fate of the patient depend so much on speedy recognition on the part of the medical man who is first called in to the case, as acute peritonitis. To him who recognises the danger and presses for an operation is the patient more indebted for his life in case of recovery than to the surgeon who performs the operation. Although we have achieved much in combating this disease, only a few years ago so fatal, a great deal remains still to be done. Even to-day numbers of people die of peritonitis, the greater part of whom would be saved if their condition were recognised in time. If I permit myself to discuss some general important points arising under the head of acute peritonitis before this audience, I do it the more willingly as I have had the opportunity during long years of making many valuable personal observations on the subject in the copious clinical material of the Moabit Hospital in this district.

The greatest advance in the domain of acute peritonitis is in the knowledge gained that it is a disease curable by operation, and that the chances of success are the greater the earlier the operation is performed.

It is only in the rarest cases, in which a very virulent poisonous material rapidly floods the system, as happens most frequently in the perforating form, that the earliest operation comes too late. Here death takes place so rapidly, often in a few hours, that the local peritoneal reaction is either absent altogether, or it leads at most to a totally insufficient sanguineo-serous exudation. The general poisoning of the system is the most pronounced of the symptoms in this class. Apart from these exceptions, however, even in cases of severe perforative peritonitis, by early operation we are able to become masters of the poison. The earlier the operation takes place the more simple it is, the less harmful, and the better the prognosis.

Our endeavours to reduce the mortality of peritonitis must be directed rather to refining our special diagnosis than to elaborating a *technique* of operation. It must be our aim to be able to judge of the condition of our patient, and especially in the early stages, with sufficient certainty to lay down a plan of treatment. I believe we are in a position to do this after 20 years of abdominal surgery, which first gave us any knowledge of the origin and course of peritonitis, whilst before that, when we only saw the disease in its later stages or in the dead-house, our knowledge was very imperfect and sometimes misleading.

## PATHOLOGICAL ANATOMY.

Although as a rule there is no parallelism between the clinical features of peritonitis and the pathologico-anatomical changes, a correct estimate of the extremely many-visaged group of symptoms is only possible when we have a knowledge of the pathologico-anatomical basis. It is only when at every stage of the disease we have before our eyes its anatomical features as they are, and as they may be by possible development, that we reach a standpoint for therapeutical measures. I would, therefore, throw out some preliminary observations, important for forming a judgment of the disease, on the mode of origin, basing them principally on my experiences in appendicular, gonorrhœal, peritonitis, and that arising from perforated ulcer of the stomach.

A grouping of the various forms of peritonitis is possible and appropriate, as they all show a course that is fundamentally uniform with only gradual variations.

Every purulent peritonitis is at bottom of bacterial origin, and is an infective disease. As with all infective diseases, the degree of inflammation depends on

the one hand on the intensity of the infection, and on the other on the resisting power of the organism. The product of the mutual action of these two components is shown in inflammations of the peritoneum in the form of the limitation that the exudation meets with as regards the other parts of the abdominal cavity. We have, therefore, arrived at the point of looking at the presence and kind of limitation as the anatomical expression of the severity of a peritonitis, and as a basis of distinction. On this basis we distinguish two groups of peritonitis, that which limits itself and that which progresses, and in this division we bring to the front the factors that are of the greatest importance in judging of the disease. All other divisions, such as diffuse and general, are to be rejected as misleading and illogical. Also between the types as distinguished above there is by no means any basal differences, but only such as are of a gradual nature and often passing into each other.

The origin of both is fundamentally mostly the same.

If infectious material passes into the abdominal cavity through a perforation or along a lymph tract, an exudation follows as a reaction of the serosa; this varies in its extent as well as character according to the virulence. At the commencement the exudation is always clear-serous; it becomes cloudy, however, by destruction of bacteria and accession of leucocytes, the more quickly and the more intensively the graver the infection is, it becomes purulent or sanious. At the same time, the more intense the infection the more it suffers loss in fibrine, and with it its plastic potentiality. Early operations have brought to light an important fact, having shown that in the first 24-48 hours the exudation in the great majority of cases is free (diffuse), lying between the intestines. It is only secondarily by deposition of fibrine that adhesions and limitations are formed that put a stop to the extension of the inflammation, and make a limited peritonitis out of one hitherto free; a so-called intra-peritoneal abscess thus forms, which through perityphlitis is well known to you all. Whether the first free peritonitis will pass into a circumscribed one cannot be predicted with certainty in the majority of cases during the first 24 hours, as both forms at this stage present the same anatomical and clinical features. I shall describe later what therapeutical consequences we must draw from this fact. The genesis of circumscribed peritonitis out of a diffuse one is certain as regards three-fourths of all abscesses, whilst I should only assume their occurrence from infection in an already closed space, according to the old views in one-fourth of the cases. The above-named genesis explains without difficulty the manifold localisation, as even a diffuse inflammation that has already attacked the greater part of the abdomen, may become localised in various places. There are certain places of predilection, however, of which the most important are the pouch of Douglas, the sub-phrenic space, and the lateral regions of the lower abdomen. The abscess is always more limited as to space than the diffuse inflammation has been, and it not infrequently happens that a peritonitis spread over the whole of the lower abdomen contracts to an abscess the size of an apple. The further course the abscess may take—complete absorption or further growth—I do not go into now.

Although the organism in every case of peritonitis has a tendency to circumscribe by deposition of fibrine and thus bring the process to a standstill, as we can see by the presence of adhesions in the rapidly advancing forms of peritonitis, success in achieving the limitation is only attained in a part, in the less virulent cases. In the remainder the disease progresses equally to more or less numerous and firm adhesions, but as a whole it still goes on, either because the infection has been too intensive from the first, or because exacerbations have taken place, and finally leads to death, unless removal of the original focus is effected. Between the intra-peritoneal abscess and the perfectly uncircumscribed free peritonitis, there are numberless transitions. It is both practically and theoretically not worth while to give special names

(a) An Address delivered before the Charlottenburger Aerzterverein.

to the various appearances that progressive peritonitis shows, and which depend on the severity of the infection and the duration of its existence.

There is still the less need for this, as on the one hand a pure type is rarely met with, and one form runs into another, and on the other the divisions mostly come from the post-mortem table. I would only distinguish two groups in peritonitis, the exudative and the dry; the latter representing the worst form of all, and forming to a certain extent the terminal link in the chain of intensity of peritonitis. Here we reach either none or only a slight sero-sanguineous serum, the organism succumbing before the peritoneum has found time to act. The inflammation runs its course under the guise of a general intoxication, whence its name—peritoneal sepsis. To this category belong the greatest number of post-operative peritonitides.

#### SYMPTOMATOLOGY.

Gentlemen, after these few observations I need not say how indispensable it is to have decided anatomical ideas for the correct estimation of all the varied symptoms of peritonitis. And it is just in peritonitis that the observation must be made that nothing but a comparison of the symptoms present, however, is the correct estimate of the individual characters of the inflammation, and that there is no one pathognomonic sign or ever will be. Of equal importance with the comparison of the symptoms present, however, is the knowledge of the previous course, above all of the length of time it has existed, as in peritonitis—as in but few other affections—every symptom in the various stages of the disease, demands a quite different consideration. The most accurate anamnesis, that goes back not only to earlier troubles, but above all to the precise determination of the onset of the first symptoms of the disease, must be got in every case. For this is of the greatest importance as regards the indications for operation. Here I would emphasise that frequently the first violent attacks of pain are preceded by some slighter symptoms—such as nausea and uneasiness—which are very important for determining the time.

If after these general observations I pass on to a short, imperfect review of the symptomatology of peritonitis, for this I fall back on my own personal experiences, and note above all the importance of the early stage as the very first thing we do, we must get some clearness as to the time in any case before us. The difficulty of early diagnosis does not lie only in the determination of the individual character of the peritonitis, but above all in distinguishing it from other kinds of affections that have nothing whatever to do with peritonitis. It is the early operations so frequently performed during recent years, that have revealed to us the similarity of so many diseases running their course in the abdominal cavity; but in the limits of this short address I must not enter into their differential diagnosis.

After obtaining the anamnesis, the general symptoms deserve careful attention, even if an estimation of them in the early stages, on account of the very changing reactive expressions, is especially difficult. Many times a glance of the physician experienced in these diseases, at the restless expression of the patient will be enough to permit of a diagnosis, wherein, however, I do not have the *facies Hippocratica* in my mind, for that is not an early symptom. A valuable sign of grave infection—although perhaps only noticeable in the sclerotic—is jaundice. One need not expect the dry tongue; that is often enough absent in the early stage. The general restlessness that patients with acute peritonitis show even in the early stage is significant.

The behaviour of the pulse, the temperature, and the leucocytes must be looked on as the most important general symptoms.

Even in the first 24 hours of a progredient peritonitis a heightened pulse is usual; at the same time, however, plenty of cases of free peritonitis run a course for days with a slow, strong pulse, and a normal pulse rate, as well as a low temperature, need not be looked on as proof that a diffuse peritonitis is not present in any given case. The scarcely perceptible galloping pulse,

especially in association with sub-normal temperature (the ill-omened crossing curve), is a late symptom and of the worst significance.

Of lesser value than the pulse is the temperature, although it may be useful, especially as regards the differential diagnosis of non-inflammatory diseases. But it is to be observed, however, that the temperature is always raised at the commencement of a peritonitis even if, in many cases, only slightly. The fever sinks the more rapidly the worse the infection is, and those cases of sub-normal temperature in grave peritonitis belong most of all to the later stage, when a low temperature is the rule. Frequently a peritonitis is ushered in with a rigor, which is repeated with exacerbations; otherwise, however, the height of the initial fever does not presage much as to the severity of the infection.

The last and perhaps the most important of the general symptoms, and at the same time the most valuable prognostic sign is the condition of the leucocytes. It happened to me first to determine a certain regular course of leucocytosis in acute peritonitis (*Chirurgencongress*, 1903. *Grenzgeb. f. Medizin u. Chirurgie*. Bd., 12, 1903. *Festschrift f. Orth*, 1902). Hundreds of cases that have been examined have confirmed this. In my opinion apparent irregularities cannot alter the value of this symptom, for the cause of them does not lie in the method, but in the variability of the disease lying at the bottom of them. Every diffuse peritonitis sets in with a high leucocytosis over 20,000, which remains at this height or rises even higher so long as the resisting power of the organism is good, but sinks the more rapidly the more the general intoxication comes to the front. Thus under certain circumstances in perforation of the stomach a subnormal number of leucocytes of 6,000 may be observed after only 20 hours. A high leucocytosis is always, therefore, a sign of a grave infection, but at the same time is to be looked upon as a favourable prognostic sign, whilst a low leucocytosis with severe clinical symptoms almost allows of a lethal prognosis. As non-inflammatory affections run their course without any considerable leucocytosis, this especially in the early stages forms an extremely important indication as regards differential diagnosis. I would only point out typhoid, nephrolithiasis, cholelithiasis, hysteria, etc., as running a course without any considerable increase of leucocytes. The leucocytosis should therefore never be omitted in any case of acute peritonitis, but it is demanded that its value should only be appraised in comparison with the other symptoms. The height of the leucocytosis of 20,000 is of but little value for the diagnosis, as the power of reaction is an extremely variable one. In the leucocyte reaction we recognise a distinct analogy with the rise in temperature; there is no doubt that the leucocytosis is the more delicate test, that most clearly reflects the resisting power of the organism. It is to be regretted that owing to the technical circumstantiality, up to the present, it has not in Germany met with the practical consideration it deserves. I shall return later to the great importance of counting the leucocytes, in determining the indications for treatment.

Of the local symptoms I look upon as the most important, the pain, the reflex tension of the abdominal walls, and the presence or absence of a resistance. To these is added the vomiting, which is to be looked on as a reflex from the infective material in the abdominal cavity, and is a regular symptom that comes on early. The initial vomiting may often cease, to come on again in the later stage, and amount even to fæcalulent vomiting. As a rule the vomiting is associated with constipation. At the commencement diarrhoea speaks rather against peritonitis.

The Pain. The spontaneous, as well as the pain produced by pressure, plays the greatest rôle in determining a case of peritonitis, the proof of it, however, difficult to obtain from the large doses of narcotics that are given. The perforative forms begin almost always with a very violent attack of pain—often as out of a blue sky—most frequently at the site of the perforation, whether at the caecal or gastric region,

and it is usually well localised. Its accurate determination at the commencement is of importance in diagnosing the point of onset of the peritonitis. It does happen, however, that the pain may be felt low down on the right side, for example, from the gravitation of the material poured out, which has often led to an erroneous assumption of appendicitis. The pain increases so long as the peritonitis spreads both in intensity and extent until, encapsulation taking place, it becomes localised and of less severity. The making out of the sensitive zones, due to increased sensitiveness of the parietal nerves, is of the greatest importance both as determining the extent of the inflammation, and as a guide to treatment. I would remark as regards the *technique* of the examination—to which Rotter has also drawn attention—that it is best to begin at the part farthest removed from the chief seat of the inflammation, using the whole hand gently, as it is only in this way that slight changes can be made out. But even an extensive tenderness on pressure does not exclude localisation later on. It is the rule that in the later stage, the pain ceases with the increase of the exudation. In still higher degree than the tenderness on pressure is the reflex tension of the abdominal walls—the *defense musculaire* of the French—to be looked upon as the expression of the heightened irritability of the nerves of the parietal serosa. A reflex tension alone suffices as a sign of grave peritonitis, and is of so much the more value as it appears early, even in a few hours, continues for a time, and then in consequence of paralysis of the intestines, passes on into meteorism. The presence of tension is to be looked on as a favourable sign, whilst meteorism makes the prognosis unfavourable. The abdomen is often so bony, hard, and drawn in in perforation peritonitis, that the diagnosis may be made without any further examination. In cases not quite so severe, a circumscribed contraction takes place on touching the spot, and this as the expression of a violent inflammation is an indication for immediate operation. In gonorrhœal inflammation the reflex abdominal tension is absent according to my experience, and an early diffuse meteorism is the rule, which Barth has also pointed out. The proof of a gonorrhœal ætiology is important, as this form of peritonitis is capable of spontaneous recovery, and does not require operation. Tubal abortion also, which is sometimes difficult to distinguish from appendicitis, runs its course with meteorism and without abdominal tension.

The last important local symptom is the presence of resistance, the most essential mark of distinction between a circumscribed and a progressing peritonitis. By resistance is to be understood that solid feeling that is met with on palpation, that is felt in one spot, where normally nothing of the kind should be felt. The impression of a resistance is produced by a conglomerate of hardened swollen loops of intestine around a fluid, mostly purulent, nucleus, whilst the free exudation at the commencement of a peritonitis, and even the slight adhesions of a progressing peritonitis cannot be felt as a resistance. As a rule, the proof has to be obtained by palpation, as in the abdominal cavity percussion offers too many sources of error. As, however, all abscesses are not accessible to palpation—I have, for example, subphrenic abscess in my mind—the other methods must be employed when there is any suspicion of abscess. For proof of resistance every part of the abdomen must be examined, as localisation may take place in any part of it. Above all, rectal and vaginal examinations must never be omitted, as two-thirds of all abscesses are situated in the small pelvis. A resistance is so valuable for this reason that it shows that localisation is in progress or has already taken place, and this for the moment mostly contraindicates operation. A resistance can never be made out during the first 24 hours: we may look for it at the earliest on the second day of the illness. It frequently comes much later; it happens also that localisation takes place much later, sometimes after 10 days or a fortnight. Frequent examinations are therefore indispensable.

(To be concluded.)

## THE INFLUENCE OF THE TISSUES ON DISEASE. (a)

By J. RITCHIE, M.D., F.R.C.S. EDIN.

DR. RITCHIE, the retiring President, delivered his farewell address. After referring to the work of the Society during the two years for which he had presided over its meetings, and the losses it had sustained through deaths among its corresponding, extraordinary and ordinary members, he passed to the subject which he had chosen for his farewell address—the Influence of the Tissues on Disease. He said that since it was natural to pay more attention to things which could be seen and handled than things which were more vague and intangible, it was natural that the rôle played by micro-organisms in the production of disease should bulk more largely in the minds of the profession than the part played by the soil—the tissues in which they bred. He thought, however, that the proclivity of the tissues was a not unimportant factor in the cause of certain diseases, and quoted a number of illustrative cases, such as, he said, could be paralleled in the experience of any family practitioner who had opportunities of watching families for long periods of time. They saw, for instance, certain families, the children of which never escaped any illness which was going, until, when they reached a certain age, their health seemed to improve. In other families the children remained healthy until they went to school, when they began to contract all sorts of infections, indicating a special susceptibility to infectious diseases.

He ascribed considerable importance to the health of the parents as influencing the germ plasm. A case which had forcibly impressed itself on his mind was that of a healthy woman who, however, was compelled to lead a very sedentary life, and in two successive pregnancies gave birth to infants who early succumbed to tuberculosis. On her becoming pregnant a third time she led an open-air life, and the child was healthy. In the fourth pregnancy she reverted to her former habits, and the infant became tuberculous. In illustration of the effect of the tissues on the course of phthisis, he instanced the case of a pregnant woman with such advanced changes in the lungs that the possibility of a post-mortem Cæsarean section was considered in order to save the child. The mother, however, survived labour, and forthwith the lung condition improved, and the phthisis was gradually recovered from. In connection with practical therapeutics, it was of the greatest importance to recognise any underlying diathetic tendency—gouty, rheumatic, nervous, scrofulous. He remembered a case of bronchitis in which ordinary remedies were of little avail until anti-rheumatic drugs were given. These speedily brought about recovery, and the correctness of the diagnosis was verified by the patient contracting acute rheumatism and endocarditis some years later. In the same way maladies in the gouty were often unrelieved until remedies for gout were resorted to. The important thing to be realised was that we had not to treat only a disease, but a patient suffering from that disease. He then went on to discuss certain phenomena in connection with infections. In a certain number of healthy persons meningococci could be recovered from the nose, pneumococci from the mouth, Löffler's bacillus from the throat, strepto- and staphylococci from the vagina. The last-named organisms grew best in alkaline media, and the secretions of the healthy

(a) Valedictory Address delivered before the Edinburgh Medical Surgical Society, Nov. 3rd, 1909.

vagina were normally acid, hence the organism did not thrive there, and might exist along with a normal puerperium. The fact that pathogenic organisms were harboured by certain healthy persons proved that something more than their presence—namely, a weakness of the tissue defences—was needed for the production of disease. In respect of the tubercle bacillus, the most important factors in susceptibility seemed to be an hereditary proclivity, as when several members of a family residing in different parts of the world fell victims at about the same age to catarrh of the air passages, and injuries to bones and joints. He had been informed that the nomadic Arab tribes were comparatively immune from phthisis, but suffered much from osseous tubercle. This he supposed was due to the fact that though they breathed pure air, they were much exposed to blows and other accidental violence. A further point raised concerned the acquirement of a degree of immunity to infectious diseases, as illustrated by the comparison of the ravages of such a disease as measles in virgin soil with its incidence in a community in which it had been known for many generations. He explained the comparative infrequency of septic infection among parturient women delivered in the most unhealthy surroundings, amidst dirt of all kinds, by ignorant midwives, to a certain immunity they had acquired through long contact with pathogenic organisms. The relation of the nervous diathesis in influencing the course of disease was also discussed, and the part it played in producing the class of patient on which so-called Christian Science preyed. The influence of the nervous system was also seen in the susceptibility of certain patients to alcohol and opium, and, beneficially, in the favourable effect of mental rest, freedom from worry, and religious faith, on the outcome of an illness. In conclusion, Dr. Ritchie said that his object had been to direct the attention of his audience to the necessity for considering the reaction of the patient's tissues and constitution to the direct exciting causes of disease.

### FRACTURE OF THE AXIS VERTEBRA, REDUCTION, RECOVERY. (a)

By A. BRUCE, M.D., F.R.C.P., F.R.S.E., AND  
D. WALLACE, C.M.G., F.R.C.S.

AFTER showing the patient, who had completely recovered, but for some exaggeration of the deep reflexes and a very slightly spastic gait, Dr. Bruce said that he had not been able to find any record of a quite similar case. The patient was a ship's engineer, and on October 7th, 1908, as he was stooping oiling his engines, someone called his name and caused him to turn his head sharply. He was conscious of a sudden pain in his neck, and felt a lump just below the occiput. He found that he had lost the power of moving his head from side to side or antero-posteriorly, with the exception of a slight amount of forward movement. Apart from this, he had comparatively few symptoms and was able to continue his voyage. He was seen by a medical man in Helsingfors, who diagnosed the condition as rheumatism, and on his return to Edinburgh, in four weeks' time, he was seen by his own doctor, who found, in addition to the fixation of the head and a projection at the back of the neck, some evidences of pressure on the cord in the shape of pains in the arms and legs, and occipital neuralgia. He was accordingly seen by Mr. Wallace, and a series of skingrams were taken which showed that the atlas vertebra was dislocated forward, and probably that the

odontoid process was fractured. As no urgent symptoms were present, it was thought inadvisable to reduce the deformity. On March 18th, as he was sitting on a chair, one of his children snatched at a shawl which was round his neck, and gave him a sudden jerk. He again had severe pain in the neck, which was quickly followed by signs of pressure on the cord, weakness of the arms, difficulty in walking, and retention of urine. As these symptoms increased, he was sent into hospital on the 21st. On admission he was found to be a healthy man with no evidence of syphilis or other previous disease. He was completely paralysed in all four extremities, with the exception of slight power of moving the fingers of the left hand. His diaphragm was also paralysed, the abdomen falling in with inspiration, and his respirations, which were extremely shallow, were carried on almost entirely by the aid of the extraordinary muscle of respiration. His superficial reflexes (abdominal and cremasteric) were abolished; the tendon jerks of both arms and legs were exaggerated; there was a double Babinski, double ankle clonus, and a slight jaw-jerk. There was also some paræsthesia—anaesthesia over the skin of the chest, and hyperæsthesia in several regions of the body. The urine was retained and the bowels had not moved for several days. The respiration was attended with so much difficulty that the patient could only say one word at a time, and then had to draw breath. As the patient's condition was obviously extremely critical, it was decided, after explaining to him and his wife the risk of the procedure, to attempt reduction. A towel was passed under the neck over the projecting axis vertebra and was held by an assistant, while Mr. Wallace made gentle traction on the cranium. After a little manipulation the bones were felt to come into a more normal position with a slightly grating sound, and immediately thereafter the diaphragm was noticed to move freely. Respiration was soon re-established, and in the course of half an hour or so the patient had regained the power of moving his limbs. His head was kept steady between sand-bags, one being also placed under the axis vertebra so as to allow the backward drag of the head to keep the bones in position. He was then put up in a poroplastic splint so as to immobilise the head absolutely. After reduction he had an attack of congestion of the lungs lasting for a few days, but, except for that, he had steadily improved, and was now almost perfectly well, though he still wore a fixation apparatus. Dr. Bruce was of opinion that the first accident had snapped off the odontoid process, which, however, was not displaced so as to cause pressure until the second injury.

### OPERATING THEATRES.

#### PADDINGTON GREEN CHILDREN'S HOSPITAL.

DOUBLE CONGENITAL TALIPES EQUINO-VARUS.—MR. ARTHUR EDMUNDS operated on a boy, æt. 5, who had been admitted with congenital talipes equino-varus. The child had been brought to the hospital when he was a few months old, the left foot being more deformed than the right. An attempt was made to improve the deformity by manipulation and the use of a malleable splint, but without any marked success. An operation was therefore performed, the tibialis anticus, the plantar fascia, and the tendo-Achillis being divided subcutaneously, and the tibialis posticus divided through an open incision just above the internal malleolus. In the case of the right foot this was eminently successful, and after suitable splinting the foot was obtained in good position, and had remained quite satisfactory. In the left foot, however, the operation did not succeed as well; the equinus de-

(a) Paper read at the Edinburgh Medico-Chirurgical Society, Nov. 3rd, 1909.



formity was, it is true, quite overcome, but the adduction of the anterior half of the foot continued. A second tenotomy of the tendinous structures of the inside of the foot improved this slightly, and a Scarpa's shoe was then employed. This apparatus consists of a rectangular jointed splint into which the foot can be firmly strapped, the deformity being remedied by a series of screws and bands. With this apparatus the improvement which had been obtained by the second operation was maintained, and, if anything, slightly increased, but a considerable amount of deformity below the mid-tarsal joint persisted. After prolonged trial of the Scarpa's shoe, it was decided to perform an operation of a more drastic character. Two methods of treatment presented themselves: one, Phelps's operation, in which the soft structures on the inner side of the foot are divided down to the bone, the foot forced into position, and the wound, which is forced to gape by this procedure allowed to granulate or skin grafted; the second a cuneiform osteotomy. As the deformity to be remedied was one almost entirely one of adduction of the anterior half of the foot, the latter operation was the one selected, involving, as it does, no division of important nerves and vessels. An incision was made along the outer side of the foot, curving forwards from the tip of the external malleolus to just behind the base of the fifth metatarsal. The soft structures were peeled off the tarsus with a periosteum detacher, and a wedge of bone, with its base upwards and outwards, removed with a chisel, sufficient bone being taken away to bring the foot into good position. The cut surfaces of bone were secured together by a silver wire, and the wound closed. Healing by first intention followed, and when this was complete, the foot was put up in plaster in a slightly over-corrected position. Six weeks later the plaster was removed, and, with the exception of a broadening of the bases of the toes and wasting of the muscles of the leg, the foot was all that could be desired.

Mr. Edmunds said that this case shows the great difference in the difficulties met with in dealing with these cases: two deformities in the same patient differing but little in apparent severity requiring, at the hands of the same surgeon, in the one case simple tenotomies, and the other a radical bone operation.

## TRANSACTIONS OF SOCIETIES.

### ROYAL SOCIETY OF MEDICINE.

#### CLINICAL SECTION.

MEETING HELD FRIDAY, NOVEMBER 12TH, 1909.

The President, A. PEARCE GOULD, Esq., M.S., F.R.C.S., in the Chair.

THE PRESIDENT showed a  
VESICAL CALCULUS WEIGHING EIGHT OUNCES,  
which had been removed by operation.

The patient, *æt.* 71, had first come under treatment in May, 1903, suffering from an enlarged prostate. A large adenoma of the prostate was then removed by the suprapubic route, and seven small faceted uric acid stones which lay behind it. In July, 1906, a large stone, consisting of uric acid and coated with phosphates, was removed from the bladder. In October, 1909, he returned complaining of frequency of micturition, pain, and alkaline turbid urine. The sound at once struck a large stone. This was also removed suprapubically, and the man is making a good recovery. The special interest in the case was the great rapidity with which the stone formed in the bladder.

Drs. H. D. ROLLESTON and G. D. H. CARPENTER showed a case of

#### SCLERODERMA AND SCLERODACTYLY.

The patient, a woman, *æt.* 30, first felt pain and numbness in the hands, and slightly in the feet in 1895. When first seen, in 1899, she had scleroderma of the face, hands, and feet. The scleroderma had advanced in some positions and disappeared in others.

The whole of the face was affected, and the skin round the mouth was radially puckered, so that the oral aperture was much diminished. The hands were claw-like, and had been almost immobile, the terminal phalanges being atrophied and the nails very small and much curved. Attacks of local syncope and asphyxia also occurred.

Dr. T. D. SAVILL exhibited a case of

#### SCLERODERMA OF THE EXTREMITIES, ASSOCIATED WITH A PREVIOUS AND FAMILY HISTORY OF ANGIO-NEUROTIC OEDEMA.

The patient, a married woman, *æt.* 56, had had attacks of angio-neurotic oedema at intervals throughout life, and so had also her mother, and one of her two daughters. The patient's attacks ceased two-and-a-half years, when the hands and feet began to get stiff and hard. The scleroderma had extended, and grown progressively worse, and the joints had become affected. Various forms of treatment had proved ineffectual.

Dr. GALLOWAY said that he had obtained the best results by continuous and patient massage in such cases.

Dr. HERRINGHAM recorded a case, where sudden and unexpected death had occurred. He thought the condition was more than a skin disease, as it affected the muscles and deeper structures, and in this way was analogous to myositis ossificans.

Dr. H. D. ROLLESTON said that the disease was subject to spontaneous recovery, and was, therefore, difficult to ascribe to a progressive sclerosis.

Dr. T. D. SAVILL believed the condition to be due to a toxo-angio-neurosis, and said that the position of the lesion at the extremities brought it into line with Raynaud's disease. The nature of the toxin was unknown, but he thought that a more intimate knowledge of the internal secretions might lead to an explanation.

Mr. ARTHUR EVANS showed a case illustrating

#### EXCISION OF THE LARYNX, PART OF THE PHARYNX, AND UPPER END OF THE OESOPHAGUS FOR MALIGNANT DISEASE.

The patient was a female, *æt.* 40, who presented herself on September 19th, 1909, with evidence of a large malignant mass filling the lower part of the pharynx and extending forwards, so as to almost hide from view the left vocal cord. There was no glandular enlargement. The patient chose to have an operation, which was performed on October 2nd, after a preliminary gastrostomy. An apparatus had been made which fitted over the pharyngeal fistula and connected with the gastrostomy tube, and thus the patient was able to take food by the mouth.

Mr. CHARTERS SYMONDS said the condition was fairly common in women between 30 and 40. When suitable for operation, the larynx was unaffected. A colleague had removed the oesophagus in one case through the side of the neck, and made a new oesophagus devised from a flap of skin.

Dr. A. SALUSBURY MACNALT showed a case of  
THORACIC ANEURYSM IN A BOY.

The patient, *æt.* 15, showed the physical signs of double aortic disease and mitral regurgitation. Also, in front of and to the right of the trachea was an expansile tumour, over which was a marked systolic thrill. A skiagram confirmed the diagnosis. The aneurysm had increased considerably in size during the last five months.

Dr. PARKES WEBER pointed out that with every expansile movement of the aneurysm, the trachea was actually pushed up.

Dr. HERRINGHAM doubted the correctness of the diagnosis, and suggested that there was a communication between arteries and veins, and that the swelling in the neck was due to enlargement of veins.

Dr. H. D. ROLLESTON suggested that it might be an aneurysm of the ductus arteriosus.

Dr. MORLEY FLETCHER thought that congenital heart disease was present.

Dr. HALE WHITE asked if there was any evidence of congenital syphilis, as this would presumably be the cause of an aneurysm?

Dr. NORMAN DALTON thought that arterio-sclerosis

was present, as shown by the kinking forwards of the carotids, such as occurred in the condition in old people.

Dr. MACNALT, in reply, said that if an arterio-venous communication existed, he should expect a continuous murmur. There was no evidence of congenital syphilis.

Mr. T. H. OPENSHAW showed two cases of RHEUMATIC SPONDYLITIS WITH TORTICOLLIS AND SUBLUXATION.

Case 1, a boy, *æt.* 11, had a mitral systolic murmur. In 1907 he had been laid up with rheumatic fever, and again in January, 1909, when the torticollis developed. Since August 3rd, 1909, the head had been kept at rest by means of a plaster cast, and the acute pain had disappeared, whilst the rigidity was passing off.

Case 2, a boy, *æt.* 12½, had had chorea three times, and now had a mitral systolic bruit. The head was noticed to be twisted in February last. He was first seen in August last, when the pain was so acute that he could not bear the slightest touch. During the last two months he had worn a felt collar, and the pain had gone. An X-ray showed that the anterior surface of the odontoid was displaced ¼-inch from the atlas.

Mr. CHARTERS SYMONDS could remember some cases of early spinal disease with mitral murmurs, and spoke of the importance of examination of the heart in spinal cases.

Mr. T. H. OPENSHAW also showed a case of MYOPATHY—INFANTILE TYPE.

Boy, *æt.* 7½. He had never walked, and had ceased to move his legs after measles at 18 months old. Mental condition was excellent. He could not stand, even with help, and there was no sign of power in the quadriceps or glutei. Flexion of the hips and knees had occurred by contraction. Head could not be held up. The arms were markedly wasted. In August, 1909, the sartorius muscle was transplanted into the quadriceps. A portion of hamstring muscles, removed for examination, showed fatty infiltration, absence of cross striation, and irregular clefts, with granular debris, with signs of regeneration in various parts.

Mr. W. GIFFORD NASH read the notes of a case of PRIMARY HYPERPLASTIC TUBERCULOSIS OF THE STOMACH AND DUODENUM.

A woman, *æt.* 33, had suffered from gastric derangement for two-and-a-half years, and signs of pyloric obstruction for six months. Operation revealed an elongated, hard mass occupying the pyloric end of the stomach and first part of the duodenum. The stomach and omentum were covered with tubercles. Gastro-jejunostomy had relieved the symptoms, but twice afterwards the abdomen had been opened and drained of ascitic fluid. The patient died five months later. No post-mortem examination was obtainable.

Dr. H. D. ROLLESTON asked if there was any definite proof that the lesions were tuberculous, as those of new growth exactly resembled miliary tubercle sometimes?

Dr. CARNAC WILKINSON, of Sydney, said that he knew of cases where so-called miliary tubercles in the peritoneum, and even lungs, were really new growth. He had obtained very good results with tuberculin in cases of miliary tubercle of the peritoneum.

Mr. GIFFORD NASH, in reply, said he had no positive microscopic proof of the nature of the lesions.

Dr. HALE WHITE, Mr. LOCKHART MUMMERY, and Dr. H. BRUCE PORTER read a paper on a CASE OF PNEUMOCOCCAL COLITIS WITH HYPERTYREXIA; SEVERE HÆMORRHAGE TREATED BY APPENDICOSTOMY.

They thought it worthy of record for the following reasons:—

(1) It was unusual for colitis due to the pneumococcus to be diagnosed during life and confirmed by bacteriological examination.

(2) It illustrated the difficulties of such a case, and the value of treatment of hypertyrexia by cold sponging; and also the beneficial effect of iced water run through the colon for it.

(3) It showed the value of appendicostomy as a means of stopping bleeding from the colon, after the failure of other measures.

(4) The value of giving subcutaneous injections of olive oil as a means of nutrition.

Dr. NORMAN DALTON asked if the agglutination reaction had been tried to Shaga's or Flexner's bacillus?

Mr. CHARTERS SYMONDS said he had seen a case in which he thought that appendicostomy had done harm, and this opened the question as to how readily the operation ought to be employed in these cases.

Dr. HALE WHITE said that attempts had been made to obtain blood for purposes of the agglutination test, but enough was not secured. There was no question in this case but that the patient had been benefited by the appendicostomy.

# OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.

MEETING HELD AT THE MEDICAL SOCIETY'S ROOMS, CHANDOS STREET, W., ON THURSDAY, NOVEMBER 11TH, 1909.

The President, Dr. G. A. BERRY, in the Chair.

Mr. SYDNEY STEPHENSON showed a case of pigment on the anterior capsule of each lens, probably representing a rare type of persistent capsulo-pupillary membrane. The President agreed with Mr. Sydney Stephenson's views.

Dr. RAYNER D. BATTEN exhibited and demonstrated an instrument for the examination of the eye under water in the erect position, and showed its application as a means of treatment. The glaucoma, for instance, after removing the instrument, the haze of the cornea disappeared. He had not had any untoward incidents with it.

Dr. DORRELL showed a case of choroidal degeneration.

Mr. W. M. BEAUMONT read a paper on oxycephaly, illustrated by a number of lantern slides. He did not agree with Patry in considering that the term syndrome should be applied to the association of oxycephaly with optic neuritis or atrophy, as the nerve involvement was a secondary result which might or might not follow. Very considerable interest had been taken in the disease in recent years since the articles by de Michel and Virchow. A number of cases had been recorded in the United Kingdom, but he thought that the credit of first pointing out the clinical symptoms of oxycephaly was due to Wm. Mackenzie, of Glasgow. His description had strangely failed to attract the attention which it deserved. This keen observer had noted the shallowness of the orbits and the consequent exophthalmos, the vertical position of the roof of the orbits, the extreme height of the head, and the blindness.

Mr. BEAUMONT drew attention to the excess of males over females; in 14 cases recorded in recent British literature there were 5 females. In Patry's list, drawn from French and German sources, there were 7 females in 64 cases. The author disagreed with Dorfmann, who advocated trephining to prevent optic atrophy, because he considered that the optic neuritis and atrophy were not due to an increase of the intracranial pressure, but rather were the result of direct injury by bony distortion. Patry had stated that Sir Walter Scott and others had suffered from a slight degree of this disease. If this were true it is possible that cases of arrested oxycephaly might be overlooked, and he threw out the suggestion that possibly sometimes so-called idiopathic optic atrophy might be due to a fruste form of oxycephaly.

Mr. BISHOP HARMAN said he had met with 6 cases in the London County Council Blind Schools, and had found the author's statement true that they were not, as a rule, mentally defective.

Mr. SYDNEY STEPHENSON recalled a case which was exhibited by Dr. James Taylor before the Society for the Study of Disease in Children, which had occipital meningocele and optic atrophy.

Mr. BISHOP HARMAN read a paper on THE MEASUREMENT OF THE DESIRE FOR BINOCULAR VISION BY MEANS OF THE DIAPHRAGM TEST.

He said individuals showed variation in the sensi-

bility of their cerebral functions. Colour and light, sense, smell, taste, and hearing all varied, and the muscle sense that maintained body balance no less. There were extremes of mental defect and striking endowment, but within the so-called average capability there was also a wide range of variation. So far the capability for binocular vision had escaped a similar critical study. Our tests either determined the presence or absence of binocular vision, or were complicated—as in the use of prisms and stereoscopes—by muscle stresses which vitiated the results.

The diaphragm test was a pure test for binocular vision, and by a variation of its mode of application it was possible to measure the desire for binocular vision as easily as the stature or weight of a man could be ascertained.

The test-cards seen through the hole in the screen of the test were viewed for their greater part by each eye separately, but a median band was seen by the direct vision of the two eyes together; this median band acted as a balancer to the eyes and their controlling mechanism; for this reason it was called the "ocular poise."

Experiments showed that different individuals, and the same individual under different conditions, required different breadths of ocular-poise, the more perfect the binocular vision the narrower the ocular-poise required to maintain the eye balance; hence the smallest measure of the ocular-poise became the measure of the desire for binocular vision.

The standard pattern diaphragm test had a fixed hole in the screen of 17 mm.; the instrument to measure the ocular-poise had a variable aperture. The aperture was varied by means of shutters which were moved by suitable gearing, the variation of the ocular-poise was shown automatically upon a scale. The scale had a compensating adjustment for the varying width between the eyes of different subjects, so that the measures given by the test became truly comparative.

Examination of binocular vision by this means showed how essentially cerebral was the controlling mechanism of the eyes, how greatly it varied in different individuals, and how profoundly it was affected by conditions of ill-health and fatigue. There seemed little doubt that on these points the test opened up many possible fields for physiological and psychological inquiry.

To the ophthalmic surgeon the new test had a particular value for those cases of occasional divergent squint with feeble convergence, which were due to defective cerebral control. These were those for which at present we had been able to do but very little. With the variable aperture to the diaphragm test the ocular-poise could be made so large as to present an attractive point of binocular fixation; and, with practice, control of the eyes might be developed, so that the balance could be maintained under conditions of gradually increasing difficulty.

Mr. N. BISHOP HARMAN read a paper on  
THE MEASUREMENT OF HYPERPHORIA BY MEANS OF THE DIAPHRAGM TEST.

If a line of letters or figures be viewed through the hole in the screen of the diaphragm test, they appeared in perfect order and alignment to the man with good binocular vision and balance. In the case of latent squint the order and alignment of the letters was altered. The line 123456789 would appear on two levels to the man with hyperphoria, in right hyperphoria, thus:—12345

56789.

The displacement was found to be constant for equal degrees of divergence, and proportionate for different degrees. So as to be able to measure the degree of divergence directly, a test-card had been prepared—one half bore a vertical tangent scale, the other a horizontal pointer. When viewed through the diaphragm test the scale was seen by one eye, the pointer by the other. When there is hyperphoria the pointer was displaced from its neutral point and appeared shifted upwards or downwards according to the kind of hyperphoria, and rested at a level of the scale corresponding to the degree of latent squint. The degree indicated was the degree required in the

correcting prism; or the same result could be obtained by measuring directly the decentralisation of any glasses worn by the patient.

The PRESIDENT discussed the paper, and Mr. HARMAN replied.

## THE WEST LONDON MEDICO-CHIRURGICAL SOCIETY.

MEETING HELD FRIDAY, NOVEMBER 5TH, 1909.

The President, Dr. NEVILLE WARD, in the Chair.

Dr. P. S. ABRAHAM showed a case of pemphigus vegetans in a woman, æt. 42. She had good health till ten months ago. An infant born four months ago. Nine weeks ago blebs appeared in crops with some itching. The pharynx and larynx are affected. The larynx showing bright redness without œdema. Attempts to cultivate organisms have so far failed. He also showed a case of multiple lupus, in which X-rays treatment had failed, and in which Mr. Reginald Morton was trying the solid CO<sub>2</sub> pencil. It was too early to report the result.

Mr. WALTER FRY showed a case of enlarged tibial tubercles in a boy, æt. 16. Dr. H. Robinson remarked that the disease was described as "Schlatter's Disease." Several members of the Society said it was common to find it in young people who played football, and it persisted in later life as a large bony tubercle.

Mr. BIDWELL said that he thought there was an inflamed bursa under the tendon in some cases.

Mr. D. C. FITZWILLIAMS showed a case of syphilitic periostitis of the right tibia in a boy, æt. 11. Pain was first noticed in the leg four years ago; this passed off. Six weeks ago there was pain and tenderness again. The tibia is enlarged in circumference, and the right tibia is an inch longer than the left.

Dr. E. A. SAUNDERS showed a case of syphilitic periostitis of the tibia in a girl, æt. 12. The disease in the tibia began a year and nine months ago with synovitis in the knee-joints; the tibial shafts were subsequently attacked. Both tibiae are now lengthened and thickened.

Mr. WALTER FRY showed a case of congenital scar of the upper lip in a child, æt. 2. There is a scar on the left side of the upper lip simulating the result of an operation for hare-lip. No operation has been performed. There was a deformity of the left nostril. There was a family history of hare-lip and cleft palate.

Mr. G. GRAHAM showed for Mr. C. B. Keetley a case of successful removal of a ruptured spleen. The operation was performed six hours after the accident; the spleen was badly ruptured and the abdomen full of blood. Now, fourteen weeks after the accident the patient, who is twenty-five years old, feels well, except for some shortness of breath on exertion.

Mr. CECIL H. LEAF showed a patient from whom he had successfully removed the tongue and glands of the neck. He recommended that the operation should be done in three stages:—(1) Removal of glands and tying lingual artery on one side. (2) The same operation on the other side. (3) Removal of the tongue.

Mr. Leaf also showed two patients in whom he had excised some portion of the colon containing carcinomatous growth, with end-to-end anastomosis. One patient required no purgative to make the bowels act, the other had to take an occasional laxative. He also showed a case of thyro-glossal cyst in a boy, æt. 11, on whom he had twice operated without completely curing the condition, though now only a drop or two of fluid exuded every six or seven days, and he thinks that no further treatment is indicated.

Mr. ARCHIBALD SMITH showed a woman, æt. 36, the subject of myxœdema, in whom the left forearm was 1½ inches larger in circumference than the right. The arm had diminished half-an-inch in circumference, and was much softer under thyroid treatment. There was no evidence of venous or lymphatic obstruction. He also showed a case of gumma, or epithelioma, on a leukoplakial tongue, in a female, æt. 57. No definite history of syphilis could be obtained. Microscopical report on a piece excised was doubtful. The growth

had become slightly flatter under treatment, but after hearing the opinion of the Society, he came to the conclusion that it would be better to remove the tongue at once, and not run the risk of glandular involvement. He also showed a child, aged 1 year and 10 months, with six fingers on each hand and six toes on each foot.

Mr. REGINALD MORTON said that from the radiogram he had made there was no doubt the extra fingers were supernumerary fifths.

Dr. BISHOP HARMAN showed two cases of "Coppock" cataract. The parents are not related, and do not appear to be related to any of the families which have been previously investigated, who exhibit this defect. The lenses of both parents are normal.

#### LIVERPOOL MEDICAL INSTITUTION.

MEETING HELD THURSDAY, NOVEMBER 4TH, 1909.

The President, Mr. T. R. BICKERTON, in the Chair.

Mr. R. W. MURRAY read a note on  
THE SURGICAL TREATMENT OF CHRONIC CONSTIPATION.

This condition, when calling for surgical interference, was met with chiefly in women who had suffered from mucous colitis. Reference was made to cases of this nature related by Mr. Arbuthnot Lane, who recommended and practised removal of the large bowel. Mr. Murray did not consider so serious a measure justifiable or necessary. Some years ago he suggested treating chronic constipation by bringing the appendix to the surface, in order that through it the large bowel might be thoroughly irrigated. Several cases were related in which this had been done with very satisfactory results.

Mr. F. T. PAUL said that he had dilated the anus in cases of uncomplicated chronic constipation, with very good result. He thought that Mr. Murray's cases were at least complicated by, if not altogether due to, colitis. He had several times used appendicostomy for this condition, and always with success. He wanted to know its value for simple intense constipation.

Dr. LLOYD ROBERTS referred to a case of mucous colitis in which, after appendicostomy, the pain caused by the lavage was so severe that the treatment could not be proceeded with.

Dr. BLAIR BELL read a paper on  
THE PITUITARY BODY, AND THE THERAPEUTIC USE OF  
THE INFUNDIBULAR EXTRACT IN SHOCK, UTERINE  
ATONY, AND INTESTINAL PARESIS.

After dealing with the work of other investigators, who had confined their attention mainly to the anatomy and development of the pituitary body, and to the physiological action of the infundibular extract upon the blood-vessels and kidney, Dr. Blair Bell described the results of his own experiments, carried out with Dr. Hick, and already published, not only upon the blood pressure, but also upon the uterus and intestines.

Further, he gave an account, with a record of illustrative cases, of the clinical use to which he had put the infundibular extract. Hitherto it had only been used occasionally as a diuretic in tabloid form. With a preparation for hypodermic administration, which had been made for him by Messrs. Burroughs Wellcome and Co., both for his experimental and clinical work, and was now on the market, he had obtained most striking results.

(1) In shock the prolonged period during which the blood pressure was raised made it a most valuable therapeutic agent.

(2) In uterine atony powerful and prolonged contractions were induced, so that in such conditions as post-partum hæmorrhage it was specially indicated.

(3) In intestinal paresis—post-operative or otherwise—immediate effects were always obtained.

Dr. Blair Bell next discussed the origin of the active principle and its probable chemical composition. He also described the method of administration of the preparation of infundibular extract for hypodermic use. Finally, the author expressed his indebtedness to his

surgical colleagues and other members of the profession in Liverpool, who had so readily tested the extract, and informed him of the results.

The paper will be published in full shortly.

Sir JAMES BARR congratulated Dr. Blair Bell on the value of his work. He thought that pituitary extract should be used with caution, and its misuse would bring it into disrepute. This drug is active in producing arterio-sclerosis, it contracts the coronary arteries, and leads to their degeneration. When used as recommended by Dr. Blair Bell, with low blood pressure, no mischief could result, and if reserved for such cases, it will hold a valuable position in therapeutics.

Dr. PENTLAND HICK, who had carried out the experimental work with Dr. Blair Bell, drew attention to the danger of using the drug in cases of heart failure.

Mr. F. T. PAUL had used it in a case of intestinal paresis after operation, with the most remarkable result, after all else had failed to give relief.

Mr. FRANK JEANS also had used the drug in several cases, and fully confirmed its action on the intestines.

Drs. A. HOPE SIMPSON and R. J. M. BUCHANAN referred to a case of splenic anæmia, with distension and ascites, in which the extract had given marked relief over a period of several weeks when given at intervals, the relief was maintained, and there was a great diminution in the size of the spleen, the fluid was kept in abeyance.

Dr. BUCHANAN also referred to the opinion held by Müller and others that the centres for the involuntary action of the uterus, bladder and rectum were situated in the pelvic sympathetic ganglia, and desired to know if the partis nervosa and intermediaris of the pituitary body could be regarded as an integral part of the sympathetic nervous system, or did the extract act by stimulating the ganglia?

He considered that those cases of so-called acute intestinal paresis associated with peritonitis, and for which operation has to be performed, are not due to any special affection of the gut itself, but to paralysis of the sympathetic nervous system, and the distension was a symptom of this condition, namely, shock.

Dr. E. E. GLYNN believed that the extract would be far less efficacious in intestinal atony due to acute general peritonitis, than to other causes.

## CORRESPONDENCE.

### FROM OUR SPECIAL CORRESPONDENTS ABROAD. FRANCE.

Paris, Nov. 14th, 1909.

#### CLINICAL ANALYSIS OF RENAL PAIN.

A PATIENT comes to consult the surgeon complaining of pain in the lumbar region. What value should be attached to the seat, the character, and the intensity of the pain in establishing a diagnosis? Such is the question that Prof. Cathelin, the eminent urologist, analysed in a recent clinical lecture.

The first thing to do in any case is to eliminate the pain common to the region. Of ten patients, fully one-half suffer from arthritism, and their sufferings are simply due to rheumatism or neuralgia, causes easily verified by absence of pain or tumour, to palpation, and also by the fact that the patients are unable, especially in the morning, to stoop down to button their shoes or pick something from the ground, while the urine is of crystal limpidity.

Satisfied on these points, the surgeon directs his attention to the kidney, where he will localise the pain and perhaps find a tumour or swelling with fluctuation. Where pain alone exists, an examination of the urine may enlighten the diagnosis. If pus is found with occasional hæmaturia and more or less cystitis, in a young patient who never had gonorrhœa, renal tuberculosis may be suspected; if no cystitis is present renal calculus may be thought of. However, here the character of the pain has its importance; it generally comes on after exertion from walking, horse, or bicycle riding. Radiography will confirm the diagnosis. Where none of the above signs are present, neither

pus, cystitis nor hæmaturia, renal cancer, hæmaturic nephritis might be suspected.

In the case of pain with a tumour, accompanied with pus in the urine, cystitis and intermittent hæmaturia, the diagnosis will probably be that of infected hydronephrosis. The absence of all those symptoms would justify the diagnosis of floating kidney. In case of hæmaturia alone, coming on at night or early in the morning, rather than during the daytime, would indicate cancer of the kidney. The cystoscope in this case would render great service.

Other renal affections, as polycystic kidney and hydatid cyst, might be mentioned, although beyond the resources of art.

To conclude, the study of pain in renal affections does not possess much real value, if its seat, character and intensity are not carefully investigated, and even then it requires to be associated with other symptoms of the important excretory apparatus of the organism. With intelligent co-ordination of all the symptoms, an almost certain diagnosis can be formulated in many of those cases which frequently escape the superficial observer.

### GERMANY.

Berlin, Nov. 14th, 1909.

At the Verein für Innere Medizin, Hr. Dietrich showed, amongst other things, a uric acid renal calculus weighing 550 gm. The patient was a woman, æt. 73, who was admitted into hospital for fracture of the neck of the femur. As she was demented at the time, no history of any kind could be obtained. On making an examination, a large, hard tumour was found in the right iliac fossa, which, after the patient's death, was found to be a calculus. It was remarkable that the kidney tissue all round the calculus was healthy both microscopically and under the microscope.

A preparation was also shown from a powerfully built man, æt. 34, who died after a few days' stay in hospital from hæmorrhage into the bowel. The autopsy showed old tuberculosis of the lungs, with recent cavities. Between the œsophagus and aorta was a cavity filled with blood clot, with rupture into both œsophagus and aorta. It was a case of tubercle of a bronchial gland that had led to spurious aneurysm of the aorta, an affection, the speaker said, that was very rarely met with.

#### THE PROGNOSIS OF ALBUMINURIA WITH SPECIAL REFERENCE TO LIFE INSURANCE

was brought before the Society by Hr. Fürbringer.

The speaker observed, as introductory, that only distinct albuminuria, as shown by the ordinary reagents, would be considered; the slight traces brought to light only by the most delicate re-agents were better left out of the question.

The first form was the so-called physiological albuminuria, with its sub-divisions into orthostatic and lordotic. Here it was not a matter of nephritic changes, but of inefficiency of the secreting tissues, often of constitutional weakness. As a rule, these albuminurias disappeared in a year or two, but they sometimes lasted longer. Many physicians held, and properly so, that the prognosis was good in these cases. He himself had watched six of them. The renal preparations of such cases were very rarely to be seen. Heubner had shown one lately. Certain slight microscopic changes were indeed present, but they could not be accepted as the cause of the albuminuria. As regarded differential diagnosis, it was to be observed that in orthostatic albuminuria there was no albumin before rising in the morning, but that it came on very quickly after getting up. Further albuminuria did not follow after administering renal stimulants, and, lastly, bodily exercise frequently had a favourable effect—a condition very different from what was met with in nephritis.

In estimating the value of the albuminuria in such cases, in his opinion proposals for life insurance with it should not be rejected, but a higher premium should be demanded. Nephritis might, indeed, make its appearance later in these cases, but the risks were not much greater than with other people that were insured.

There was also an intermittent albuminuria after infective diseases. These cases were to be considered quite favourably.

(2) Nephritis chronica levis s. superficialis. These cases were characterised by excretion of albuminous urine, with nephritic cylinders and blood corpuscles, a condition very rarely followed by anything serious. The speaker had watched a dozen such cases for years. Three of them recovered completely; the symptoms still remained in the other seven, but had led to no ill consequences. Such cases should not be rejected by the medical referee, but the premiums should be raised, and they should be only accepted conditionally.

(3) Nephritis chronica. This was an absolute bar to life insurance. The sub-acute forms were not to be rejected absolutely, but they must be put back for a time, as they sometimes recovered without a trace.

(4) Albuminuria of pregnancy. This demanded great caution, and repeated thorough examination before passing.

(5) Renal-palpatory albuminuria. As was known, albuminuria frequently appeared after palpation of the kidney, and even after palpation of the abdomen. You saved yourself from making a mistake by examining the urine before the palpation.

(6) "Sport" albuminuria. From late investigations this was shown to be always of a traumatic nature, and always ran a favourable course. It did not show any marked peculiarities as compared with the intermittent form.

(7) Acute nephritis did not generally disappear for some months. We should wait at least a year, therefore, before sending in a report in such a case.

(8) Contracted kidney. As the affection often lasts for decenniums with the system in full working order, the insurance of such patients should be rejected only when some systemic deterioration could be proved to be due to it.

Hr. Senator was of opinion that there was some kidney fault at the bottom of all albuminurias. A medical referee to a life insurance company should not be allowed to admit a case of orthostatic albuminuria with a raised premium unconditionally. Recovery might certainly take place, but it could not be absolutely reckoned on. How did the speaker define the difference between nephritis levis superficialis and benign nephritis? He himself had lately reported two cases of chronic nephritis that had died of uræmia, after 20 and 44 years respectively. The so-called benign uræmias must not be looked upon as harmless.

Hr. Fürbringer replied that he would only accept cases of orthostatic albuminuria and those suffering from benign nephritis at a higher premium after a long trial.

### AUSTRIA.

Vienna, Nov. 14th, 1909.

#### SPECIFIC TREATMENT OF RACHITIS.

ZINGER, in an original article, gives his results in the treatment of 36 cases by the new and old treatment.

Since Glisson, in 1670, first described the disease as one of childhood, though its devastating action was usually postponed till the second year of life. It was then recognised as a dyscrasia of the general organism, due to faulty hygiene in the mode of life, sometimes idiopathic, and sometimes having a secondary origin. The fact that it was a disease confined exclusively to the lower class, and more particularly arising in damp, narrow dwellings, with overcrowding, where secondary diseases would be contracted in the form of phthisis, syphilis, etc., led to the belief that a more hygienic condition would eradicate the disease. Later the digestive system was believed to be one of the primary causes; from this arose a chemical examination by Boerhaave and Switen, which has been continued to the present day by Zweifel and Kassowitz, without even yet arriving at a satisfactory explanation.

In 1842 Baginsky and Chassat commenced experiments on the feeding of young animals by excluding all forms of lime in the dietary, and thus produced rachitis according to the chemical theory of the time.

Friedleben and Tripier refuted this conclusion, and affirmed that rachitis was produced when the animals were fed on lactic acid, or when this ingredient was largely present in the food; but after much controversy it was agreed that rachitis was easily induced when the calcium was absent from the food, and a large quantity of lactic acid added, both parties claiming success. Zweifel next followed with his hypothesis of the reduction of chlorides in the blood, which checked the absorption of the calcium salts and thereby induced rachitis. These to-and-fro opinions brought Kassowitz to the conclusion that the fault lay in the absence of the phosphate of lime, one of the constituents of bone. The rational treatment followed of adding phosphorus to cod-liver oil, then iron, and finally green fruit as restoratives or prophylactic in this destructive disease.

The difficulty now begins with both young and adult in taking cod-liver oil with all these adjuncts, while green fruit is expensive and difficult to find during the winter months. To obviate this objection, "Phytin," "Visvil," "Bioson," have been put on the market with various reputed values. The latest is "Salossit," which the writer has used with wonderful success. It is composed of:—

Phosphorus anhydride, 1.17 per cent.  
Organic matter, 2.32 per cent.  
Calcium, 0.87 per cent.  
Magnesia, 0.16 per cent.  
Hygroscopic water, 0.66 per cent.  
Saccharum lactis, 94.82 per cent.

The reasonable combination of this compound induced Zingher to take an equal number of rachitics for cod-liver oil, etc., and "Salossit" treatment, therefore 18 were placed on Kassowitz's phosphorised cod-liver oil and 18 on "Salossit." From the tables given, not one suffered from gastric or digestive disturbance under the "Salossit" treatment, and the recovery was more effective and rapid, as tested by the microscopic dynamometer, and general appearance. In 6 to 8 weeks a striking improvement could be observed. With the cod-liver oil the results were good also, but of the 18, 7 of them had to have the treatment suspended on account of sickness and vomiting, with general gastric disturbances. Two of these were not able to tolerate the cod-liver oil, and had to be treated in the end with "Salossit," and improved rapidly after its commencement. It is best given in milk; a teaspoonful twice a day to a child of one year, older children three times a day. The 94 per cent. of saccharum lactis makes it an agreeable food to take, and it is easily borne by the most delicate child.

#### ADRENALIN TEST.

Zanfrognini, of Modena, has added another colour test to the number of volumetrical now in use. A solution of the brown superoxide of manganese,  $MnO_2$ , is converted into the colourless oxide, finally leaving a red-coloured solution in proportion to the amount of adrenalin present. This reaction is very sensitive, detecting one in a million. The colour is very stable after it is formed, remaining for days without change.

#### VITILIGO.

The aetiology of this obscure disease has long puzzled dermatologists, but Hesse, of Dresden, has cut the Gordian knot by telling us that fright or strong emotion both turn the hair white in a night. Why exclude the skin from the same pathological change as the hair? This is reasonable logic, but what about the facts he leaves us to infer?

#### SAUSAGE POISONING.

Hinze records the analysis of a number of cases, and points out that the incidence of the poison is most severe in the eyes. Twenty-four hours after a sausage has commenced decomposition, acute symptoms of intoxication, such as vomiting, lowered pulsation, albuminuria, constipation, anuria, and slight fever will appear, but the principal phenomena are paralysis of the ocular nerve, paresis of both oculo-motorius and abducens nerve, with paralysis and anæsthesia of the lower extremities. In severe cases encephalomyelitis disseminata toxica also appear. As most of the cases are fatal, he proposes a symptomatic treatment, stimulants, diuretics, hot baths, with injections of "Sperminum Poehl" as an antitoxin.

## FROM OUR SPECIAL CORRESPONDENTS AT HOME.

### EDINBURGH.

**POOR-LAW COMMISSION REPORT.**—In the Majority Report of the Poor-law Commission upon the Scottish Poor-law, which was issued on November 2nd, a number of topics of medical interest are touched upon. One of the aspects of medical relief in Scotland which seems most forcibly to have struck the Commissioners is the extent to which abuse of medical charities prevails among comparatively well-to-do persons. This abuse of hospitals, the inability of persons in moderate circumstances to obtain the advice of a specialist otherwise than by entering a voluntary hospital, and possibly also the desire of hospital authorities to procure "interesting" clinical material, have led, the Commissioners state, to the exclusion of many poor patients and cases of chronic illness. For such patients there is no provision, apart from the Poor-law hospital, to which they gravitate after being refused by the voluntary hospitals. There is no intelligent co-operation between the voluntary and the Poor-law hospitals, and no clear line, economic or medical, can be drawn between the cases dealt with in the two classes of institutions. As regards destitute and non-destitute alike, surgical and acute medical cases may be dealt with by both, though the tendency is for the voluntary hospitals to confine their attention mainly to cases of acute illness and to send chronic cases to the parish infirmaries. Compared with the voluntary hospital patient, the patient in the Poor-law hospital is at a great disadvantage. He is subjected to the stigma of pauperism, yet he or his relations may be called on to refund part or the whole of the cost of treatment, in some cases a charge of as much as 15s. a week being made. Thus, by availing themselves of the parish hospitals, patients are sometimes more independent and less pauperised than by going to medical charities. As Dr. Leslie Mackenzie put it:—"We thus have the administrative paradox that an institution intended by statute for the 'friendless, impotent, poor,' has evolved into a 'pay' hospital for poor persons. As showing the amount of gratuitous outdoor relief in the principal Scottish towns, the following particulars are given:—In Glasgow, 153,354 outdoor patients were treated during the last completed year. In Edinburgh about 88,500 patients attend the out-patient departments and dispensaries in the course of a year; in other words, taking the population for 1901, about 28 per cent. of the population receive free medical treatment. In Leith there were 12,000 consultations during 1905, and in Dundee during 1905-6, 35,097 patients were treated. Abundant evidence was laid before the Commissioners that many persons who in England would obtain medical orders are treated by medical charities, which therefore are relieving the rates to a much greater extent than is the case in England. The Commissioners regret that, notwithstanding the proverbial thriftiness of the nation, there should not exist in any town in Scotland a single provident dispensary such as are so common in England, and they deprecate the practice which has grown up unnoticed of large numbers of the community accepting charitable relief instead of adopting some provident method for themselves. They recommend that the benefit of gratuitous medical aid should be restricted to the really needy, and the adoption of some form of insurance. They do not, however, bring forward any very specific proposals, recognising that the existing state of affairs which has gradually grown up is very different to what obtains in England and Ireland, and that it is essential to introduce a new system with the co-operation of the medical profession. They therefore suggest that a departmental committee be appointed to inquire into the matter, and that some of the free dispensaries be converted into provident institutions.

**EDINBURGH ROYAL INFIRMARY.**—At their last meeting the managers appointed Mr. Henry Wade, F.R.C.S. Ed., to be assistant surgeon, and Dr. James Miller, D.Sc., M.D., to be assistant pathologist. There were six applicants for the former and three for the latter post.



**PRESENTATION TO DR. SMITH, CREETOWN.**—Dr. David Smith, who has been compelled through ill-health to relinquish his private practice and public appointments, was made the recipient, on Saturday, November 6th, of a silver salver and a handsome cheque from the inhabitants of Creetown and district. Dr. Smith has a long connection with the district, and that he is much esteemed is shown by the fact that this is the second presentation which has been made to him.

**PRESENTATION TO PROFESSOR CRUM BROWN.**—On the occasion of his retirement from the Chair of Chemistry, Professor Crum Brown was, on November 12th, presented with his portrait in the debating hall of the University Union. It had been originally intended to make the presentation an academic one, but so many of his friends outside the University were anxious to participate in it that the circle of subscribers had to be enlarged, and the actual number reached was 350. The presentation was made by Sir William Turner, who spoke as Professor Crum Brown's oldest academic colleague. The portrait is from the easel of Mr. E. A. Walton, R.S.A., and is a faithful and pleasing likeness.

**FREEDOM OF EDINBURGH FOR SIR WILLIAM TURNER.**—A circular convening a meeting of the Lord Provost's Committee has been issued, to consider a proposal which will be made from the chair to confer the freedom of the city on the Right Hon. H. H. Asquith, Prime Minister; Principal Sir William Turner; and Principal the Rev. Dr. Whyte, of the New College.

### GLASGOW.

**CLINICAL TEACHING IN GLASGOW—PROPOSED ALTERATIONS.**—The University of Glasgow have now formally committed themselves to extend the scope of clinical teaching by utilising the clinical material in other hospitals in the city other than the Western Infirmary, which is in close proximity to the University where the University students resort to at present. It is proposed to endow two professorships in the Glasgow Royal Infirmary, one of Medicine and the other of Surgery, with emoluments of £400-500 per annum. Other two chairs in Pathology and Gynaecology were contemplated, but have for the present been abandoned. It is further contemplated to render eligible for appointment as Lecturer-Examiners in the University of Glasgow the physicians and surgeons of the Royal Infirmary, and probably of the Victoria Infirmary. The selection of the candidates is to rest with the University Court and the managers of the Royal Infirmary. A second important proposal is that the number of students attending a qualifying class of clinical instruction shall not exceed a limit to be fixed by the University Court, and that the needs of women students are to be specially provided for. When these arrangements are completed students will have exceptional opportunities of studying a great variety of diseases, which at present are debarred from them on account of the great clinical material in the various hospitals of Glasgow not being utilised.

### BELFAST.

**MONAGHAN ASYLUM AND WORKHOUSE.**—At the last monthly meeting of the Monaghan and Cavan Asylum Board, the question of the present overcrowding of the Asylum was discussed. It appears that there are at present in the Asylum 504 men and 417 women, or 53 men and 75 women in excess of the legitimate numbers for their space. The Resident Medical Officer, Dr. Donaldson, warned the Board that if they tried to take in more than the proper numbers the inspectors would at once charge them with overcrowding. After considerable discussion the following resolution was passed:—"That we appeal to the Local Government Board to close up one or more workhouses in the counties of Cavan and Monaghan, with a view to provide accommodation, if advisable, for the 120 harmless lunatics now in Monaghan Asylum." It appears that while the Asylum is overcrowded the workhouses are in many cases nearly empty.

## LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

### CORONERS AND GRATUITOUS WORK.

*To the Editor of THE MEDICAL PRESS AND CIRCULAR.*

SIR,—I was much interested in your account of Dr. Moss's spirited action in reply to the Wrexham coroner. That the latter should expect to get a diagnosis to help him at an inquest under cover of a private letter to a medical man is simply an outrage on good taste, as much as to conduct a judicial inquiry into a case of sudden death of the kind involved without a *post-mortem* examination constituted a simple travesty of the whole thing. My own experience of Coroners' inquiries has at times been somewhat similar. I have known deaths that might have been due to poison, violence, suicide, lesion of brain, or of other internal organs settled by the jury on the strength of a pure haphazard guess, which might have been reduced to a statement of convincing fact had the body been skilfully examined. If the great bulwark to the safety of the life of the subject existing in "crown's quest" is to be preserved, it will be only through the strong and fearless action of the coroners themselves in ordering *post-mortem* examinations and calling expert witnesses whenever circumstances demand that course. The money thus expended is a simple insurance premium fund for the protection of our lives.

I am, Sir, yours truly,

A HAMMERSMITH SURGEON.

London, W., November 11th, 1909.

### SCHOOL CLINICS.

*To the Editor of THE MEDICAL PRESS AND CIRCULAR.*

SIR,—On page 490 of your issue November 10th, 1909, I note, in a leaderette, that the question of "School Clinics" is referred to, to the effect that negotiations are in progress between the London County Council and the London hospitals for the treatment of children.

I should like to know what are the terms proposed. Will these in any way benefit pecuniarily the pockets of the members of the various staffs of these hospitals? I see £4,000 a year is the estimated expenditure. How much of this will find its way into the pockets of the medical men concerned, or, is it only another addition to the gratuitous work done by these staffs? Free education, free feeding, free doctoring—there is very little left for the parents to do in the way of parental thrift and responsibility. Fathers and mothers in the olden days denied themselves for the sake of their children, and were proud of their thrift and independence. Now they spend the money they once saved for these purposes in other directions. Pride and independence are things of the past. The burden of unremunerative work falls heavily upon the shoulders of the hard-worked medical profession. The money which an independent minded man would spend on his children now goes to football matches, cricket, the music hall, and theatres. They can find money for these but not for the discharging of the liabilities of independence.

It is time a kick was made against the increasing burdens of gratuitous work on the part of the members of the medical profession.

I am, Sir, yours truly,

JOHN W. MARTIN.

1 Claremont Place, Sheffield,  
November 11th, 1909.

### SUPPURATION IN THE ACCESSORY NASAL SINUSES.

*To the Editor of the MEDICAL PRESS AND CIRCULAR.*

SIR,—It can have been only his sensitive modesty, alluded to by your correspondent "A Dental Surgeon" that closed his eyes to my exposure of the causes of suppuration in the accessory sinuses. If he will refer to your issue of November 3rd, he will find in the second column of page 464: "(2) The diseases that may extend from the bony walls in-

clude periosteal and sub-periosteal abscess from dental caries causing suppuration in a large majority of the cases seen."

Perhaps I may also venture to remind your correspondent that the lecture he is good enough to describe in such flattering terms was a general survey of the causes and symptoms of suppuration in all the nasal accessory sinuses and not, as he seems to think, in the maxillary antrum alone.

The influence of dental disease on antral suppuration, as your correspondent should be aware, is one of the most debated points at the present day, and its discussion in such a general lecture as the one referred to would have been quite out of place. My statement that it is only in a large minority of the cases of maxillary suppuration that dental caries can be shown as a direct cause expresses the view held by the majority of observers in this country and on the Continent, who have the widest experience of antral suppuration from all causes.

In this connection I may also refer your correspondent to a recent paper ("The Treatment of Chronic Suppuration of the Maxillary Antrum: An Operation and New Instruments," *Lancet*, June 19th, 1909) of mine, in which these matters are treated somewhat more fully than was possible in the lecture that has provoked his superfluous criticism.

As for his concealing his name through being a "little sensitive in the matter of personal advertisement," I have yet to learn that there is anything that could shock the most sensitively "ethical" Mrs. Grundy in publication over one's name in a professional journal of repute and standing such as yours.

I am, Sir, yours truly,

JAMES DONELAN.

Manchester Square, W.,

November 12th, 1909.

#### SIR VICTOR HORSLEY AND ANÆSTHETICS.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—As one who has had considerable experience of the administration of anæsthetics by various methods, I should like to support your opinion that reliance on the perfection of an apparatus rather than on the skill and attention of the anæsthetist may entail grave danger to the patient.

Even if it be assumed that a given apparatus will supply an exact percentage of chloroform to the inhaled air, and further that such percentage is a sure indication of the amount absorbed, the fact remains that the anæsthetist must use his own judgment in selecting a percentage suitable to the patient.

A percentage vaunted as absolutely safe, and probably so in the majority of cases, may thus have its share in the production of a fatal result.

Without mentioning other practical objections, I would maintain that it is difficult, if not impossible, for anyone to attend to the working of a complicated apparatus, and at the same time to take note (as is desirable) of the progress of the operation, and to watch carefully the condition of the patient, especially as regards the respiration and the maintenance of a free air-way, with which, indeed, the majority of inhalers mechanically interfere.

I am, Sir, yours truly,

J. D. M.

Nov. 5th, 1909.

#### UNDERGROUND CURE FOR ASTHMA.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—In illustration of the curative effects of the air on the Underground Railway, I remember the case of a man under my care in Victoria Park Hospital. This man had for some time been liable to severe attacks of spasmodic asthma, and one day he told me he must leave the hospital, as the air of the well-ventilated wards caused his breathing to be constantly difficult. I asked him what sort of air agreed best with him, and he replied that he never felt so easy and free from chest oppression as when in one of the tunnels of the Metropolitan Railway.

It is a well-known fact that the smoky air of a town is most beneficial to those who suffer from true spasmodic asthma, with no bronchitic complication.

The inhaled carbon doubtless has an anti-spasmodic action on the spasmodically fixed bronchial muscle. The spasm is overcome, and then easy breathing follows. The medicine I have thought most useful in these cases is belladonna. This same drug we know to be of great service in certain forms of constipation where ordinary purgatives are very unsatisfactory. I have thought that these cases of constipation may be due to spasm of the circular muscular fibres of the intestines, so that in this respect they resemble spasmodic bronchial asthma. Smoking a cigar or pipe is often a means of relief in this form of constipation, as many persons know well by experience.

I am, Sir, yours truly,

JOHN C. THOROWGOOD, M.D., F.R.C.P.,  
Consulting Physician to Victoria Park Chest  
Hospital.

Bognor, November, 1909.

## SPECIAL ARTICLES.

### HEMEL HEMPSTEAD WORKHOUSE.

Princess Christian, patron, and the officers of the Workhouse Nursing Association have addressed the following letter to the Rt. Hon. Mr. Burns on the case of Nurse Bellamy at Hemel Hempstead Workhouse Infirmary:—

Workhouse Nursing Association, Dacre House,  
Dean Farrar Street, Westminster, S.W.

SIR,—We beg your consideration of the following remarks:—

Nurse Bellamy having now been acquitted from the charge of manslaughter for accelerating the death of a male inmate by ordering him a bath, we feel it to be in the public interest to draw attention to the state of things this case disclosed, in the hope that out of evil good may come.

In the first place it exemplifies the deplorable uncertainty of the Local Government Board's orders and rules governing the administration of workhouses and infirmaries, and as a natural, if not necessary, consequence, the laxity of the manner in which effect is given to them, and the grave distress and danger to the inmates which result. In the next place, it is a glaring example of the cruel position in which young women may find themselves who are induced to apply for and obtain the position of nurses in these institutions. We are referring more particularly of course to the smaller and country institutions.

There is a third point to which we desire also to draw particular attention, and that is the practice that obtains in some places, as it does at Hemel Hempstead, for the offices of clerk to the Guardians, Coroner, and clerk to the Justices being all held by the same person. We cannot believe that but for this practice the unfortunate Nurse Bellamy would ever have been on her trial on such a terrible charge as that from which she has just been dismissed. The facts appear shortly to be these:—She had borne the brunt for some time of complaints made to the matron by all the nurses of the excessive work imposed upon them and had herself been before the Guardians on the subject. She had in consequence incurred the displeasure of the matron and the clerk to the Guardians. The inevitable result was that when the trouble arose this gentleman as Coroner ordered an inquest, he proceeded to the inquiry with a bias, if nothing more, against her. This bias is obvious from the newspaper reports (which were very full) of the proceedings and of his summing-up to the jury. As the Coroner did not think it necessary to order a post-mortem, the findings of the jury as to the cause of the deaths followed the doctor's opinion, and the principal object of the inquest became the fixing of responsibility, if any. From the manner in which it was conducted, judging by the reports to which we have referred, one might not unfairly suppose it was undertaken for the express purpose of fixing the responsibility upon Nurse Bellamy, and so to provide a scapegoat for those in authority and for the wholly indefensible system permitted at this institution. But however this may be, the jury did in fact find her guilty, although they are

reported as having taken two hours in coming to their conclusion, during most of which time the Coroner was, we are informed, with them in consultation. Whether this be a regular proceeding or not we do not know, but it seems to us to be in any case highly improper, and in this case was highly significant, that even with the Coroner's assistance the jury should have taken so long a time to come to the conclusion they eventually did. Immediately after her committal the nurse was arrested by the police on their own account on a similar charge, locked up for the night and brought before the magistrates the next morning—the police stating that they had previously had instructions to arrest her whatever the conclusions the jury might arrive at regarding her! The case then came before the Justices as a police prosecution, and their clerk and adviser was the same gentleman who had already dealt with it before the Guardians and as Coroner. She was, of course, committed also by the Justices. But when it came in due time before the grand jury at the assizes, they refused to return a true bill and the case was dismissed. This meant that the grand jury found that the evidence was such that no jury of 12 men could reasonably find Nurse Bellamy guilty of culpable negligence. Under these circumstances the Crown, of course, offered no evidence against her on the Coroner's committal, and the jury accordingly found her not guilty. What a commentary on the Coroner's action! But what of the nurse? Is it nothing that she should have to stand in the dock on such a charge? Is it nothing that she and her family—highly respectable though humble people—should have to undergo the anxiety and suspense imposed upon them for several weeks, not to mention the heavy expense her defence entailed? Fortunately for her, the case aroused such widespread sympathy that many nurses and others—most of them entire strangers to her—have subscribed to a defence fund for her.

It is, indeed, a big blot on the laws of our land that it should be possible for our workhouse sick poor to be subjected to such incompetent and insufficient protection as this case discloses, and that nurses and others should be appointed who are unfit for the discharge of the duties they will be called upon to perform, led by the belief resulting from their appointment that they were fitted, and then subjected to such treatment as Nurse Bellamy has suffered for a misadventure which is not surprising under the conditions which obtained, but which could not have arisen were the laws as they should be, and those appointed under them were properly qualified for their appointment.

We are, on behalf of the Association,

Faithfully yours,

HELENA.

MERIEL S. TALBOT, Vice-President and Chairman of the Executive Committee.

LOUISA TWINING, Vice-President.

J. G. TALBOT, Member of the General Committee.

J. WILSON, Hon. Treasurer.

## MEDICAL NEWS IN BRIEF.

### Royal College of Surgeons of England—Annual Meeting of Fellows and Members.

THE following resolutions are to be moved at the annual meeting of Fellows and members of the Royal College of Surgeons of England, which takes place at the College on Thursday, the 18th inst. The President will take the chair at 3 p.m.

To be moved by Mr. Joseph Smith:—

"That this twenty-fifth annual meeting of Fellows and members again affirms the desirability of admitting members to direct representation on the Council, which as now constituted does not represent the whole Corporation; and that it does so in order that the constitution of the Council of the Royal College of Surgeons of England shall be in keeping with modern ideas of true representation."

To be moved by Dr. A. S. Morton:—

"That, in fulfilment of the promise made by the

President of the College in 1906 this meeting strongly urges the Council to impress upon the Government the necessity of amending the Midwives Act next session, in order that provision may be made to secure just remuneration for professional services rendered by medical men under this Act."

To be moved by Mr. H. Elliot-Blake:—

"That the Council of the Royal College of Surgeons of England, through their Joint Committee of Delegates, and when it is found necessary, and in any agreement with the Royal College of Physicians of London, be asked to approve of and promote a new Charter and Act of Parliament to incorporate the Royal Colleges of Surgeons of England and Physicians of London, so as to form Royal Colleges or parts of the University of London."

### National University of Ireland.

THE Senate met on Thursday, November 11th, and Friday, November 12th.

Sir Christopher Nixon, Bart., M.D., LL.D., was elected the Vice-Chancellor of the University.

The General Board of Studies was constituted, and the Standing Committee and Finance Committee were elected.

Sir Christopher Nixon, Bart., M.D., LL.D., was elected as the Representative of the University on the General Medical Council.

The following resolutions were passed, after consideration of a report from the General Board of Studies:—

1. That for the year 1910 the First University Examination shall not be obligatory on students in Medicine.

2. That for the year 1910 the First University Examination shall not be obligatory on students in Engineering and Music.

3. That all the courses for the Degrees of the Royal University, including those for Matriculation, be adopted for the Examination of the year 1910, in the form in which they would have been for 1910 if the Royal University had continued to exist; but that the practical Examination, Mathematics, Honours, Second University Examination in Arts be discontinued.

(N.B.—The courses for Scholarships and Entrance Exhibitions, Studentships, Junior Fellowships, Medical Studentships, Travelling Medical Scholarship, and Browne Gold Medal and Prize do not come within the scope of this resolution.)

4. That up to December 15th, 1910, the practice which obtained in the Royal University of Ireland of admitting to Matriculation, without further examination, candidates who had passed the Senior Grade Intermediate Examination in the subjects of the Matriculation Examination be continued.

### The London and Counties Medical Protection Society.

A SPECIAL GENERAL MEETING of the members of the London and Counties Medical Protection Society, Limited, will be held, by order of the Council, pursuant to the provisions of Article 9 of the Articles of Association of the Society, on Wednesday, November 24th, 1909, at 4 o'clock in the afternoon, at the registered offices of the Society, No. 31 Craven Street, Strand, London, W.C., for the purposes of considering, and, if thought fit, passing, with or without modification, a resolution to the following effect:—

"To approve the action of the Council in arranging for an insurance of the members of the Society against any damages or costs up to several thousand pounds which may be awarded at any time against any member in any proceedings which the Society may undertake on behalf of its members pursuant to Article 16 of the Articles of Association of the Society, and for that purpose to raise the subscription of the members of the Society to a sum not exceeding £1 per annum."

A large number of the members of the above Society have already effected individual insurance against damages and costs in defensive actions only, and it is now thought desirable to insure the whole of the members of the Society collectively. The insurance can be effected much more satisfactorily when the

Society is insured *en bloc*, and if the above scheme is carried through, a member of the Society will be indemnified against any loss, whether he succeeds or fails in any action, provided only that his case is undertaken by the Council of the Society.

#### Royal College of Surgeons of England.

A QUARTERLY meeting of the trustees of the Hunterian Collection was held on the 10th instant, at the Royal College of Surgeons. Lord Walsingham occupied the chair, and there were also present at the meeting Sir Edward Fry, Sir Douglas Powell (President of the Royal College of Physicians), Mr. Henry T. Butlin (President of the Royal College of Surgeons), Sir John Tweedy, and Professor G. Sims Woodhead (Cambridge). The trustees expressed their sense of the loss the Board had sustained by the death of Sir Thomas Smith. It was decided that the election of a trustee in the vacancy thus occasioned should take place at the meeting of the board in February next. The President of the College presented a report from the conservator of the museum upon the result of a microscopic examination of certain Hunterian specimens.

#### Inquest on Exhumed Body at Accrington.

AN inquest was held at Accrington, on the 2nd inst., on Catherine Morris, 37, single woman, of Accrington, whose body was exhumed from All Saints' burial yard, Clayton-le-Moors, the previous Thursday.

It was stated that the certificate of death given by Dr. Hanna stated the primary cause of death as gastritis.

A post-mortem examination, conducted by Dr. Geddie, of Accrington, and Dr. Briggs, of Blackburn, revealed the cause of death as septic poisoning.

The jury returned a verdict that death was due to blood poisoning arising from after-birth consequent on abortion. There was nothing to show, however, how and when the latter took place.

#### Royal City of Dublin Hospital.

ON the 29th ult. the Countess of Pembroke performed the ceremony of declaring open a new children's ward in the Royal City of Dublin Hospital. The ward is one of several additions made to the hospital, and rendered possible by a grant from the Pembroke Irish Charities Fund.

#### The Royal University of Ireland.

THE following candidates have passed the First Examination in Medicine of the Faculty of Medicine, Autumn, 1909.—Henry Alcock, Charles Bannigan, William W. Blair, Maud S. Budd, Patrick Cagney, Edward P. Carey, David M. Clements, William Deely, John J. Dowdall, Francis W. Doyle, B.A., Joseph Doyle, Sch., Owen J. R. Forde, Edward T. Freeman, Walter F. Hare, Herbert M. Jackson, Thomas Kennedy, Maurice B. King, Marie R. Lynch, William McElroy, Henry McGlaughlin, Mary C. McKenna, B.A., Edward U. MacWilliam, Edward A. M. Magennis, John Mooney, William A. Murphy, Gerald P. O'Donnell, Henry T. O'Neill, Samuel E. Picken, John E. Power, Robert L. Rea, Augustine K. Roche, John A. Sellars, Edward Tempny, Catherine J. Timony.

Honours in Botany.—First Class.—Joseph Doyle, Sch. Second Class.—Edward U. MacWilliam, Robert L. Rea.

Honours in Zoology.—First Class.—Joseph Doyle, Sch. Second Class.—Robert L. Rea, Edward U. MacWilliam.

Honours in Chemistry.—First Class.—Joseph Doyle, Sch., Robert L. Rea. Second Class.—None.

Honours in Experimental Physics.—First Class.—Joseph Doyle, Sch. Second Class.—Robert L. Rea, Edward U. MacWilliam.

Exhibitions.—The following candidates were qualified upon their answering to obtain Exhibitions. The names of those disqualified by standing, or otherwise, are printed in italics.—First Class £20.—Joseph Doyle, Sch. Second Class £10.—*Robert L. Rea.*

The Second Examination in Medicine.—Exhibitions.

—First Class £25. George H. Mahony. Second Class £15.—Patrick J. Walsh.

Honours.—First Class.—George H. Mahony. Second Class.—Patrick J. Walsh.

Upper Pass.—John H. Beverland, Thomas Marron, George R. Naylor.

Pass.—Samuel Acheson, James P. Aiken, Thomas Black, Dominick J. Cannon, Francis L. Cleland, Thomas F. Colfer, Christopher Costello, Daniel J. Enright, Edward H. Fennessy, Llewellyn D. I. Graham, John E. Harford, Richard Hennessy, John R. Henry, John V. Holmes, William J. Hunter, B.A., Frederick Jefferson, James T. Kyle, Charles Lafferty, John McFadden, Edward McSorley, William M. Morris, Herbert V. O'Shea, John F. Rahilly, Walter N. Rishworth, John M. Sheridan, Thomas Smyth, B.A., Stanley P. Stoker, Harold V. Walsh, Samuel E. Watson.

Exempted from further examination in the subjects set opposite their names.—Thomas M. Adamson, Chemistry; William Hickey, Anatomy and Physiology; Thomas F. O'Donoghue, Chemistry; John H. Pollock, Anatomy and Physiology; William Turner, Chemistry.

Dr. Henry Hutchinson Stewart Scholarship in Medicine.—George H. Mahony.

The Third Examination in Medicine.—Exhibitions.—First Class £30.—Joseph O. Hodnett. Second Class £20.—Oriel J. O. O'Hanlon.

Honours.—First Class.—Joseph O. Hodnett. Second Class.—Oriel J. O. O'Hanlon, John C. Johnson, B.A.

Upper Pass.—Frederick Crook, Robert J. McConnell, Henry J. V. Mullane.

Pass.—John L. Brown, Maurice J. Cogan, John F. Craig, Robert C. Cummins, Thomas P. Davy, Alexander J. Dempsey, Ernest S. Dixon, Gerald Fitzgerald, David J. Foley, Homer H. C. Lynch, John Lyons, Thomas J. R. Maguire, Cornelius Martin, William M. Millar, Alfred J. Moran, Denis V. Morris, Mary A. Murphy, William O'Brien, Joseph A. O'Flynn, Eileen M. O'Keefe, John C. Osburne, Joseph Patrick, Joseph Prendiville, Walter N. Rishworth, Thomas G. Rothwell, William J. Smyth, Francis J. D. Twigg, Patrick W. White, William Wilson.

The M.B., B.Ch., B.A.O. Degrees Examination.—Upper Pass.—James A. Brown, James B. Butler, M.A., John J. Gilmore, James A. Hanrahan, Edward G. Kennedy, Ernest W. Kirwan, John M. McCloy, Thomas Scanlan.

Pass.—Charles Alexander, Joseph Anderson, John A. Black, Percy M. J. Brett, Bartly Byrne, Samuel R. Campbell, Francis S. Carson, David S. Clarke, B.A., Aibert V. Craig, William Dickey, William A. Frost, Patrick Hayes, Jeremiah Holland, David Horgan, John C. Houston, David J. Jackson, B.A., Thomas Kennedy, Henry H. MacWilliam, B.A., William Magner, Thomas P. Magnier, Thomas J. S. Moffett, Alexander Patton, B.A., Samuel P. Rea, Jeremiah Reidy, David A. Rice, Alfred M. Thomson.

Exempt from further Examination in Medicine and Midwifery.—John H. Harbison, B.A.

Honours.—In Medicine Group.—First Class.—Edward G. Kennedy, John J. Gilmore, James B. Butler, M.A. Second Class.—John M. McCloy.

In Surgery Group.—First Class.—Edward G. Kennedy, William Dickey. Second Class.—Thomas Scanlan.

In Midwifery Group.—First Class.—Bartly Byrne, Samuel R. Campbell. Second Class.—James A. Hanrahan.

Exhibitions, £21 each.—In Medicine Group.—Edward G. Kennedy. In Surgery Group.—Edward G. Kennedy. In Midwifery Group.—Bartly Byrne.

The M.D. Degree Examination.—John Finnegan, M.B., B.Ch., B.A.O., Samuel J. Killen, M.B., B.Ch., B.A.O., Charles B. Pearson, M.B., B.Ch., B.A.O., Stephen B. Walsh, B.A., D.P.H., M.B., B.Ch., B.A.O., Thomas Walsh, B.A., D.P.H., M.B., B.Ch., B.A.O., Samuel H. Whyte, M.B., B.Ch., B.A.O., James E. Wilson, M.B., B.Ch., B.A.O.

The Medical Studentship.—James M. O'Connor, B.A., M.B., B.Ch., B.A.O.

The Diploma in Mental Diseases Examination.—Daniel Gillespie, M.D.

## NOTICES TO CORRESPONDENTS, &c.

**CORRESPONDENTS** requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

### SUBSCRIPTIONS.

SUBSCRIPTIONS may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s.; post free at home or abroad. Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially-appointed agents. Indian subscriptions are Rs 15.12. Messrs. Dawson and Sons are our special agents for Canada.

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### WARNING.

MESSRS. WILCOX, JOZEAU AND CO., chemists, 49, Haymarket, S.W., desire to warn members of the medical profession against a man, thinly built, apparently about 40 years of age, shabbily dressed, with a pronounced habit of sniffing, who has been representing himself as their agent and making extraordinary proposals. No such person is in their employ or has had any authority whatsoever to use their name.

**HEMOPHTYSIS.**—Notification of tuberculosis in Ireland is only compulsory in those districts where the local authority, Urban or Rural District Council, has, with the consent of the County Council, adopted Part I. of the Tuberculosis Prevention Act.

## Meetings of the Societies, Lectures, &c.

WEDNESDAY, NOVEMBER 17TH.

**NORTH-EAST LONDON POST-GRADUATE COLLEGE** (Prince of Wales's General Hospital, Tottenham, N.).—Clinics: 2.30 p.m.: Medical Out-patient (Dr. T. R. Whipple); Skin (Dr. G. N. Meachen); Eye (Mr. R. P. Brooks). 3 p.m.: X-Rays (Dr. H. Pirie).

**MEDICAL GRADUATES' COLLEGE AND POLYCLINIC** (22 Chenies Street, W.C.).—4 p.m.: Mr. T. P. Legg: Clinique (Surgical). 5.15 p.m.: Mr. Arbuthnot Lane: "Operative Treatment of Fractures."

THURSDAY, NOVEMBER 18TH.

**ROYAL SOCIETY OF MEDICINE (DERMATOLOGICAL SECTION)** (20 Hanover Square, W.).—5 p.m.: Dr. Arthur Whitfield: Localised Scleroderma. And other cases.

**NORTH-EAST LONDON POST-GRADUATE COLLEGE** (Prince of Wales's General Hospital, Tottenham, N.).—2.30 p.m.: Gynaecological Operations (Dr. A. E. Giles). Clinics: Medical Out-patient (Dr. A. J. Whiting); Surgical (Mr. Carson). 3 p.m.: Medical In-patient (Dr. G. P. Chappel).

**HOSPITAL FOR SICK CHILDREN (UNIVERSITY OF LONDON)** (Great Ormond Street, W.C.).—4 p.m.: Lecture (Medical): Dr. Thompson: Pyelitis in Infancy.

**MEDICAL GRADUATES' COLLEGE AND POLYCLINIC** (22 Chenies Street, W.C.).—4 p.m.: Sir Jonathan Hutchinson: Clinique (Surgical). 5.15 p.m.: Dr. Francis Warner: "Backward Children and their Training."

**ST. JOHN'S HOSPITAL FOR DISEASES OF THE SKIN** (Leicester Square, W.C.).—6 p.m.: Chesterfield Lecture: Syphilis: Treatment (Constitutional and Local in all its forms).

FRIDAY, NOVEMBER 19TH.

**ROYAL SOCIETY OF MEDICINE (ELECTRO-THERAPEUTICAL SECTION)** (20 Hanover Square, W.).—8.30 p.m.: Dr. Reginald Morton: The Treatment of Nævi and other Cutaneous Lesions by Electrolysis, Caustery and Refrigeration, with a Demonstration on the Use of Solid Carbon Dioxide.

**SOCIETY OF TROPICAL MEDICINE AND HYGIENE** (11 Chandos Street, Cavendish Square, W.).—8.30 p.m.: Dr. W. Thomas: (1) Oesophagostomiasis in Man (with specimens); (2) The Results of Experiments on Apes, Monkeys, Guinea Pigs, etc., when inoculated with Virulent Blood of Yellow Fever Cases or by the Bites of Infected Stegomyia calopus; (3) Mossy Foot of the Amazon Region (with microscopic specimens); (4) Notes on Stimson's Spirochæte Found in the Kidney of a Yellow Fever Case. (With epidiascope demonstrations.)—Paper (with specimens) will be read for Dr. J. Numa Rat, St. Kitts, W.I., on the So-called Guinea Worm of the Island of Nevis.

**NORTH-EAST LONDON POST-GRADUATE COLLEGE** (Prince of Wales's General Hospital, Tottenham, N.).—10 a.m.: Clinique: Surgical Out-patient (Mr. H. Evans). 2.30 p.m.: Operations Clinique: Medical Out-patient (Dr. A. G. Auld); Eye (Mr. R. P. Brooks). 3 p.m.: Medical In-patient (Dr. R. M. Leslie).

**CENTRAL LONDON THROAT AND EAR HOSPITAL** (Gray's Inn Road, W.C.).—3.45 p.m.: Lecture: Dr. D. McKenzie: External Ear.

**MEDICAL GRADUATES' COLLEGE AND POLYCLINIC** (22 Chenies Street, W.C.).—4 p.m.: Mr. H. L. Eason: Clinique (Eye).

MONDAY, NOVEMBER 22ND.

**MEDICAL GRADUATES' COLLEGE AND POLYCLINIC** (22 Chenies Street, W.C.).—4 p.m.: Dr. Wilfred Fox: Clinique (Skin). 5.15 p.m.: Dr. F. J. McCann: "Lecture-Demonstration on the Methods of Suturing a Ruptured Perineum."

TUESDAY, NOVEMBER 23RD.

**CENTRAL LONDON THROAT AND EAR HOSPITAL** (Gray's Inn Road, W.C.).—3.45 p.m.: Trephoscopy, etc.: Mr. Gay French.  
**MEDICAL GRADUATES' COLLEGE AND POLYCLINIC** (22 Chenies Street, W.C.).—4 p.m.: Dr. Guthrie Rankin: Clinique (Medical). 5.15 p.m.: Dr. Theo. Hyslop: "Diagnosis of Insanity."

## Appointments.

**BEARN, A. RUSSELL, M.B., Ch.B. Edin.**, House Physician at the Hampstead General Hospital.

**CATES, JOSEPH, M.D. Lond., D.P.H. Camb.**, Assistant Medical Officer of Health to the City of Coventry.

**DALY, ASHLEY S., M.R.C.S., L.R.C.P. Lond.**, Assistant Anaesthetist to the London Hospital.

**FITZGERALD, F. C., L.R.C.S. (Irel.), L.A.H. Dub.**, Certifying Surgeon under the Factory and Workshop Act for the Newtownbutler District of the county of Fermanagh.

**GEORGEON, J. W.**, Certifying Surgeon under the Factory and Workshop Act for the Lauder District of the county of Berwick.

**HEY, WILSON H., F.R.C.S. Eng., M.B., Ch.B. Vict.**, Resident Surgical Officer at the Manchester Royal Infirmary.

**LLOYD, D. G., M.R.C.S., L.R.C.P. Lond.**, Medical Officer to the Llanfyrnach Rural District Council.

**MUMFORD, WILFRED G., M.R. Lond., F.R.C.S. Eng.**, Honorary Assistant Surgeon to the Royal United Hospital, Bath.

**PRICE, J. T., M.D. Dub.**, Certifying Surgeon under the Factory and Workshop Act for the Llansawel District of the county of Carmarthen.

**STEPHEN, W. LEONE, Junior House Physician at the Prince of Wales's General Hospital, N.**

## Vacancies.

**Nottingham General Dispensary.**—Assistant Resident Surgeon. Salary £170 per annum, with apartments, attendance, light, and fuel. Applications to C. Cheesman, Secretary, 12 Low Pavement, Nottingham.

**Nottingham General Dispensary.**—Resident Surgeon. Salary £200 per annum, with apartments, attendance, light, and fuel. Applications to C. Cheesman, Secretary, 12 Low Pavement, Nottingham.

**Manchester Children's Hospital, Out-Patients' Department, Gartside Street, Manchester.**—Medical Officer. Salary £180 per annum. Applications to H. J. Eason, Secretary.

**Whitechapel Union.**—First Assistant Resident Medical Officer. Salary £130 per annum, with rations, furnished apartments, coal, gas, and washing. Applications to F. J. Toole, Clerk to the Guardians, Union Offices, 74 Vallance Road, Whitechapel, N.E.

**Newcastle-upon-Tyne City Lunatic Asylum, Gosforth, Newcastle-upon-Tyne.**—Junior Assistant Medical Officer. Salary £140 per annum, with furnished apartments, board, and laundry. Applications to Dr. Calcott, Medical Superintendent.

**Newcastle-upon-Tyne Dispensary.**—Visiting Medical Assistant. Salary £160 per annum. Applications to the Hon. Secretary, Joseph Carr, Chartered Accountant, 26 Mosley Street, Newcastle-upon-Tyne.

**Pembrokeshire.**—County Medical Officer of Health. Salary £400 a year, and £50 a year for travelling and all other expenses. Applications to Wm. Davies George, Clerk to the County Council, Shire Hall, Haverfordwest.

## Births.

**CRIDLAND.**—On Nov. 10th, at 52 Waterloo Road, Wolverhampton, the wife of Arthur Bernard Cridland, F.R.C.S.E., of a son.

**HANSON.**—On Nov. 13th, at 1 Hurley Street, London, W., the wife of Reginald John Edward Hanson, M.A. Cantab, F.R.C.S.E., and of Hayling Island, Hants, of a daughter.

**FAIRLIE CLARKE.**—On Nov. 12th, at Sussex Lodge, Hortham, the wife of A. J. Fairlie Clarke, M.C., F.R.C.S., of a daughter.

## Marriages.

**JONES—ROBINSON.**—On Nov. 11th, at Emmanuel Church, West Hampstead, Macnaughton Macnaughton-Jones, M.B., second son of Dr. Macnaughton-Jones, of 131 Harley Street, London, and Isabel Jessie Robinson, widow of Ernest Hugo Robinson, and elder daughter of the late Samuel Pownceby, of Hampstead, and Mrs. Pownceby, 11 Bracknell Gardens, London.

**EVERIDGE—ROBERTSON.**—On Nov. 11th, at Saint Mary's Church, East Molesley, John Everidge, M.R.C.S., L.R.C.P., son of the late James Walter Everidge, of Surbiton, to Kathleen Isabel, only daughter of the late Henry James Robertson, J.P., of Grove House, East Molesley.

**PORTER—RAYNER.**—On Nov. 13th, at St. Mary's Church, Hornsey, William James Porter, M.B., Ch.B., of Dundee, New Zealand, to Edith, third daughter of Mr. and Mrs. Richard Rayner, "Cintra," Hornsey.

## Deaths.

**CASTANEDA.**—On Nov. 8th, Dr. M. Castaneda, M.B., M.R.C.P., late chairman of the Italian Hospital, Queen Square.

**MARSHALL.**—On Nov. 11th, at the Homestead, Teddington, Middlesex, Mary A., the wife of John J. de Zouche Marshall, L.R.C.S.I., and eldest daughter of the late Benjamin Warwick, of "The Lodge," Englefield Green, Surrey, in her 60th year.

**THOMSON.**—On Nov. 13th, at 54 St. Stephen's Green, Dublin, of heart disease, in his 65th year, Sir William Thomson, C.B., Hon. Surgeon to His Majesty the King.

# THE MEDICAL PRESS AND CIRCULAR.

"SALUS POPULI SUPREMA LEX."

Vol. CXXXIX.

WEDNESDAY, NOVEMBER 24, 1909.

No. 21.

## NOTES AND COMMENTS.

### One-portal Qualification.

THE rivalry of the multiple medical corporations is tending towards the inevitable goal of a single qualification for medical men. The competition of the provincial universities and the unreasonable conditions of the London University degree have gradually brought about the present position of affairs. Medical practitioners want a degree, not a mere qualification to practice, and they can get what they want in the provincial universities. The colleges, moreover, have kept their diplomates of the lower rank at arm's length, and have retained the government in the hands of a small and irresponsible favoured class. They also control the General Medical Council by their nominees, to the exclusion of the main body of general practitioners. Hence we have the spectacle of medical students deserting the ancient colleges and schools and flocking to the modern, well-equipped, and comparatively democratic universities. London has had the game in her hands, so far as England is concerned, for the last 400 years, but it now looks as if the curious mediæval system of close corporations has received its death-blow. Yet, notwithstanding the enemy at their gates, the Royal Colleges in all three kingdoms do not appear anxious to capitulate. The garrison seems resolved to face the slow and painful process of starvation rather than to concede such latterday privileges as representative control and co-operation with their rivals in the interests of the public.

### All in the Same Boat.

At the annual meeting of the Royal College of Surgeons of England, last week, the members made the most of their yearly opportunity of protest. They clamoured for direct representation of members on the Council; they protested against the inaction of the College in the control of quack medicines; they insisted on the necessity of amending the Midwives Act; they advocated incorporation with the University of London. Similar views have been advanced on former occasions, but the College has never shown the least sign of being influenced by them. Nor is the Royal College of Physicians of London less aloof and out of touch with modern life. The Royal College of Surgeons of Edinburgh has refused its licentiates the boon of membership, so as to place them on an equal footing of qualification with colleges that grant a membership. Both the Royal Colleges of Physicians and of Surgeons of Edinburgh unite in excluding the lower ranks of their diplomates, whose payments have probably contributed the bulk of their income, from any voice in their own government or representation on the General Medical Council. Practically the same

tale applies all round to the rest of the diploma-granting bodies. Now that the provincial universities have appeared on the scene, the diploma-granting bodies may be brought to reason. Meanwhile, the medical student who is wise in his generation prefers the provincial university with a degree at the end of his course therein to the ancient college or hall that takes his money, grants him a qualification, and then drops his acquaintance unless he has taken the higher diploma.

### The Hemel Hempstead Case.

THE letter of the Workhouse Nursing Association with regard to the Hemel Hempstead Workhouse has been met by a protest from the Justices of the Dacorum Division of Hertfordshire. They met and framed a resolution—published in the *Times* of November 18th—emphatically protesting against the statements contained in the Association's letter reflecting upon the action of the Clerk to the Justices. "They greatly regret that currency has been given to charges which any reasonable inquiry would have shown to be without foundation." At the same meeting the Justices' Clerk intimated that, so far as he was personally concerned, the matter was by no means at an end. The pith of the letter published by the Workhouse Nursing Association appears to lie in their contention that it is undesirable for the posts of Coroner, of Clerk to the Guardians, and of Clerk to the Justices to be vested in one individual. On general grounds, there certainly appears to be a *prima facie* reasonableness in the protest against a plurality of the kind in question. At any rate, the matter seems worthy of some public attention and discussion, in order that a trustworthy conclusion may be formed as to the desirability or otherwise of this sort of multiple officialdom.

### Who is to Blame?

A CASE of chloroform poisoning of a child, aged five years, at Denaby, was last week reported in the *Sheffield Daily Telegraph*. The evidence showed that the wife of a collier procured, for the relief of toothache, a "bottle" of chloroform, which she left on a mantelpiece. Early in the morning two children living in the house stole down into the kitchen. The elder of the two, a boy of eight, got down the bottle and drank some of the contents and gave some to his little sister, who cried for it. No medical man was called until some hours later, when the girl became drowsy. The Coroner censured the person who had left the chloroform on the mantelpiece, but surely the key to this and many other cases of accidental and intentional poisoning lies in the laxity in which dangerous



drugs are sold to the public. What sane and responsible medical man would entrust anyone with a quantity of chloroform sufficient to kill, say, several children? If it comes to that, we doubt if the use of chloroform as a local application for toothache is justifiable on therapeutic grounds. At any rate, we feel safe in asserting strenuously that so potent a drug should be dispensed only on the written authority of a qualified medical practitioner, and that its sale should be guarded as that of any other poison. Perhaps the Pharmaceutical Society will take action on the strength of this occurrence. Meanwhile the attention of the Denaby Coroner may be drawn to this view of the ultimate responsibility in tragedies of this kind.

**Dr. Freyberger**  
as a Public  
Educator.

FROM time to time the public newspapers are illumined by pathological tit-bits culled from the evidence of Dr. Freyberger. When, some years ago, Mr. Coroner Troutbeck, taking his courage in both hands, ignored the medical practitioners of his district in favour of an "expert," it was only natural that the performances of the latter should be watched with a somewhat critical eye. When the members of a learned profession are ousted on the implied ground of their incompetency to ascertain the cause of death on post-mortem and other evidence, it is inevitable that they should want to know the reason why? One of the most recent of Dr. Freyberger's statements that appear to have stimulated the journalistic imagination of Fleet Street is to the effect that a certain deceased person might have lived for some time had his stomach been removed. A fact of that kind is painfully familiar to the medical practitioner who is called upon to treat daily that commonest of cancerous conditions, carcinoma of the stomach. Why Mr. Troutbeck, almost alone of coroners, should demand the special services of a whole-time expert pathologist to impart information of this kind is somewhat of a mystery. If the medical men of his district are qualified to diagnose the maladies of fellow human beings during life, surely they should be able to interpret the facts of the post-mortem room with sufficient accuracy for all practical inquest purposes. If they are not thus competent there must be something radically wrong with the system of medical education and examination.

## LEADING ARTICLES.

### THE GOAL OF ONE-PORTAL QUALIFICATION.

SINCE the time when King Henry VIII. was wise enough to establish a legal medical qualification, there has elapsed a period of nearly 400 years. He clearly recognised that the creation of a properly trained and attested class of practitioners involved as a necessary corollary the rigorous repression of unqualified pretenders. He accordingly conferred upon the Royal College of Physicians of London the right of granting licences to practice, together with well-nigh unbounded summary powers for the punishment and restraint of quacks and of false remedies. These powers and duties were later, in whole or in part, extended to the whole of England. Corresponding powers, duties and privileges were conferred at various times upon similar corporations

in Scotland and Ireland, a fact that is natural enough when we take into consideration the much stronger national individualism that in former times stamped the relationship between the countries now included within the title, the United Kingdom of Great Britain and Ireland. At present we purpose dealing with England. Not long after—according to some authorities, at the same period—the College of Surgeons came into existence, and the apothecaries were differentiated, but gradually there grew up three licensing corporations, the physicians for medicine, the surgeons for surgery, and the apothecaries, who license in both faculties. Quite recently the Royal Colleges of Physicians of London and of the Surgeons of England have combined to give a conjoint diploma. Another comparatively modern creation has been the University of London, an examining, but not a teaching, body, with a high standard of examination knowledge. The history of the jealousies and rivalries and selfishness of the various licensing bodies would require a book of ponderous dimensions. Suffice it to say that the one effort of each and every corporation appears to have been to make confusion worse confounded, and to sacrifice the interests of the public and of the medical profession to those of colleges and halls, and of the individuals into whose hands the autocratic control of those bodies had drifted. Some idea of the present position may be gathered from the proceedings at the annual meeting of the Royal College of Surgeons last week. The members, who are excluded from any voice in the government of the College, number 17,000, and, as usual, took advantage of the occasion to protest against their exclusion, which, as one speaker remarked, is "not in keeping with modern ideas of representation." Another speaker pointed out that "the present position produced friction, animosities and bad feeling, which was detrimental to the whole profession." A motion in favour of admitting members to representation on the Council was carried *nem. con.*, but it seems doubtful, in view of previous experiences, whether the resolution will have the least practical outcome. Another ominous resolution was carried to the effect that the Council be asked to promote, if necessary in conjunction with the Physicians, a Bill to amalgamate the Colleges of Physicians and Surgeons, either alone or as parts of the University of London. From this meeting it seems clear that the democracy of medicine is overwhelmingly in favour of the reduction of licensing bodies; in other words, they have practically adopted the principle of the one-portal system. On the other hand, the President of the College, Mr. H. T. Butlin, appears to have adopted the usual *non possumus* official attitude as regards the members. While he admitted that London students suffered great disadvantage through the want of a degree, he was doubtful as to whether any arrangement could be entered into with the University of London. Almost at the same time we find a Fellow of the Royal College of Surgeons, Mr. A. T. Norton, C.B., and an examiner in surgery at the Apothecaries' Hall, advocating much the same thing. Speaking at the annual dinner of the Apothecaries' Society, he said that the want of a

London medical degree on reasonable terms was driving away the students to an extent that became a catastrophe to the various licensing bodies. He urged the creation of a new university, to be called the State University of Medicine, to grant one degree in medicine and in surgery. Under this university should be incorporated all the diploma-granting bodies in the United Kingdom. That is our old friend, the one-portal system, under a somewhat thin disguise, brought before the public under somewhat altered circumstances. The "diploma-granting bodies" of the kingdom—to put the matter bluntly—are threatened with extinction owing to the competition of provincial universities which grant a degree in medicine and surgery on reasonable terms. It is somewhat interesting to note the attitude of the ancient corporations still refusing to fall in with modern views as to representative control, and still clinging to their ancient traditions of oligarchy and aloofness. The Councils of the Scotch and Irish Colleges also exclude their diplomates of lower rank from their councils; nay, what is more, they nominate members of their own oligarchies on the General Medical Council, which is thereby rendered representative of a small governing class and not of the whole profession. It looks, however, as if the days of close corporations and of class government were coming to a close in the medical world, and the one-portal system of qualification emerging into the arena of practical politics.

#### MARTYRS TO SCIENCE.

FOR the achievement of great results science must not be pursued in a spirit of narrow utilitarianism. The worker must not be perpetually asking himself what is the practical value of this or that fact; to establish truth must be his sole desire and aim; and he must be satisfied with the reflection that there was never yet discovered a single new fact, isolated or useless as it might at first appear, that did not in the end fall into place as an indispensable atom in the sum of knowledge upon which advancement depends. The cultivation of science in this spirit calls for rare devotion and self-sacrifice. In any worldly sense, it is very seldom in the least remunerative, and it seldom brings either popularity or fame. It must be borne in mind that it is only within the last thirty or forty years that science has been afforded any place in our educational system, and secured the position to which it is entitled in our ancient Universities. Even now a great proportion of our youth from among whom governing classes and statesmen are selected pass through school and college without any instruction in science whatever. Scientific research of the highest quality can rarely be done to order, and, indeed, no superlatively great work in science, art, or literature was ever produced under such conditions. True genius will not be tempted by wealth, nor will it be turned from its bent by anything short of starvation and death. It is impossible to know how many martyrs to science—men whose lives are silently sacrificed in this form of service to humanity—the years produce, but that some do sink beneath the weight of

their self-imposed burden there can be no doubt. Nothing came out more clearly in the biography of Darwin than the fact that had he not possessed resources which enabled him to guard his health and husband his feeble strength, and concentrate his powers on the tasks he set himself, he could not have formulated more than a fragment of the epoch-making theories he at last constructed. It is, however, more than difficult to suggest a scheme whereby developing talent or genius might be recognised and guarded at the public charge. It is at present impossible to make the great body of the people understand the purpose or utility of abstract science, or to recognise merit in those who labour at it. It is always impossible to find more than a few people in any class of society who are acquainted with the names, much less with the work of contemporary men of science, upon whose success the world's forward movement may depend. Whilst, however, genius is rare, talent and industry are comparatively common, and the question how best to help investigators to pursue lines of research for which they may have displayed fitness is assuming more and more prominence. The Government annual grants, administered through the Royal Society, which are now being advertised, form one of the signs of the times. It would be an enormous encouragement to science-workers if they could be made to feel that should want overtake them, or should they die and leave their families in need owing to their devotion to their calling, the State would intervene with adequate help. It ought never to be necessary to appeal to the charitable public in cases like those of Dr. Herbert Wells and of the non-medical expert, Mr. H. W. Cox, the one who has just died, and the other who has suffered mutilation—pure martyrdom in the cause of science.

#### CURRENT TOPICS.

##### Medical Referees and the Compensation Act.

AN important judgment was delivered in a stated case heard by four Scotch judges in the Second Division. A miner who was injured on February 25th, 1907, was paid compensation by agreement until October 20th, 1908. Payment was then stopped, and on November 3rd, 1908, the parties applied to the Sheriff for a remit to a medical referee, who reported that incapacity had ceased on October 20th, 1908. The plaintiff apparently acquiesced until May, 1909, when he said incapacity had recurred, and applied for renewal of compensation. In defence it was pleaded that the report of the medical referee was conclusive, and barred the claim. That view was accepted by the Sheriff, who, however, stated a case for the opinion of the higher court. The Division answered that the decision of the medical referee did not bar the pursuer's application for arbitration. The gist of the decision was apparently that, in the words of Lord Justice Clerk, the effect of a referee's report was conclusive evidence of something, and nothing more; that it was in no sense a decision. The report might be made the basis of arbitration or of other legal proceedings. This

judgment—United Collieries, Ltd., and George King—is of importance as defining the powers of the medical referee. As Lord Ardwell remarked, nothing could be predicated as necessarily certain under that Act or any proceedings under it. We presume the miner will now apply to the Sheriff for compensation once more, in spite of the previous adverse opinion of the medical referee.

#### **Veterinary Surgeons and Public Health.**

WITH the growth of sanitary science and the increased knowledge of the diseases of animals communicated to man, a closer association has arisen between the medical and veterinary professions. The assistance of veterinary surgeons has naturally proved of great effect in public health administration, and for such duties as the inspection of milch cows and of meat they are by their education peculiarly fitted. Nevertheless, the position to be occupied by the veterinary surgeon in public health work should be clearly defined, and we believe it should never be other than that of assistant or consultant to the medical officer of health. As soon as he is given an independent position confusion arises, and we have the anomaly of dual control of the public health of a district. This is unfortunately the position created recently in Ireland by the action of the Local Government Board, who have authorised the appointment of veterinary surgeons as inspectors of cowsheds and dairies, to hold office and perform their duties independently of the medical officer of health of the district. If the public health is to be preserved, its care must be in the hands of one officer who should be supplied with whatever assistance is necessary, but it is foolish in the extreme to appoint two independent officers whose duties are bound to overlap.

#### **The Passing of the Royal University.**

THE Royal University of Ireland, after an existence of thirty years, has ceased to be. For many years it was obvious that it failed adequately to supply what was needed in Irish education and that in any re-organisation of Irish University education, its individuality was bound to disappear. Its failure was inherent in its constitution, for, like some other enterprises in Irish education, it was built on a model already becoming obsolete in England. Like the old London University, the Royal University was in essence an examining board, and it was a curious blunder in statesmanship to start such an institution in Ireland at the very time when its weakness was becoming evident in London. Nevertheless, while observing the necessary failure of the Royal University, it would be unjust not to give praise to the high ideals of those to whose hands the work of the University was committed, and to the energy and ability shown in its administration. From the first a high standard of knowledge—in medicine as in other subjects—was demanded, and this standard had its effect on the other educational bodies in Ireland. In the thirty years of its life, it gave the seal of its degrees to many men who have become distinguished in science, in literature, and in public

life. Moreover, though the faults in its constitution were grave, the Royal University offered the possibility of education to many to whom knowledge would otherwise have been a sealed book. It has now given place to two universities, full of life, vigour and promise. Their success seems assured, but some at least of that success will be due to their predecessor, whose high standard we are sure they will maintain.

#### **Health of the Paris Garrison.**

SOME weeks ago the vital statistics of Paris, London and Berlin were contrasted in these columns much to the disadvantage of Paris. In La Ville Lumière, the city of light, as her inhabitants are proud to style her, everything has been sacrificed to art and beauty. From the high architectural point of view Paris is a superb city, but from the point of view of sanitary science there is much behind the scenes that is retrograde, obsolete and barbarous. The health of the troops as lately described in a report to the Academy of Medicine, extending over four years and prepared by the medical staff, is worse than that of the civil population. The report contrasts the statistics of the Paris garrison with those of the troops in Berlin. In Paris there are 45,000 men in barracks, in Berlin 65,000. The French mortality is so much greater, that with an effective force equal to that of Berlin the deaths would be as heavy as those in the entire German army. The figures with regard to measles, influenza, and consumption show an enormous disproportion of deaths between the Paris and Berlin garrisons, whilst the Paris typhoid fever statistics are truly shocking, the mortality being ten times greater than in Berlin. The number of dysentery cases in Paris, during the four years was twice as large as that in the whole German army. The general unhealthiness of Paris is set down as a prime cause of the trouble, but it is also stated that the barracks are in most cases old and dilapidated. Several date from the 16th and 17th centuries, and are as much below the requirements of modern hygiene as the fortifications of Vauban are below the necessities of present day warfare.

#### **Abortion-Mongering in Lancashire.**

A WELL-KNOWN Lancashire medical officer of health sends us a batch of local papers containing recent reports of cases in coroners' and police courts which seem to indicate that the trade in procuring abortion must be in a flourishing condition in the County Palatine. In the coroners' courts numerous cases have been investigated of deaths following miscarriage in which the medical men have formed grave suspicions of foul play, but in which, although the autopsies have confirmed the grounds for suspicion, enough evidence has not been forthcoming to support a criminal charge. In two cases rumours having reached the practitioners who had certified the deaths that criminal methods had been adopted, the bodies were exhumed, and inquests held, without however, fixing the guilt upon any person. In several cases women are awaiting trial at the assizes charged with using instruments or administering noxious drugs. Female quack practitioners, sometimes in the garb of hospital

nurses, we are informed, are to be found in many market places. Here in handbills and with loud voice, they proclaim the virtues of their "famous female pills, warranted to remove all obstructions," and explain the efficacy of their "special pessaries a harmless, sure, and safe preventive." Giving evidence in one case Dr. Willcocks, the Home Office Analyst, proved that the "female pills" each contained 1.9 grains of aloes. They were prescribed to be taken three at bedtime and three in the morning, a sufficiently drastic dose, if continued, and decidedly calculated to produce the desired effect!

#### English Winter Climates.

At this season a newspaper correspondence on the advantages to invalids of English winter resorts seems now to have become a regular phenomenon, and whilst there is sometimes displayed an over-anxiety to advertise the merits of this or that locality, there can be no doubt about the truth of the general statement, that a large proportion of the invalids who now winter abroad could find in the South of England every climatic advantage their particular malady calls for. The cases need, of course, selecting. These islands do not offer the climatic peculiarities of the Nile Valley, or of Sicily, or of Algiers, or of the West Indies, any of which may be most suitable in certain forms of disease; but for those which demand simply an outdoor life, with a moderate temperature, and a fair amount of sunshine, every requirement can be found at home. And it is not only in the large towns that the delicate visitor is now catered for. There is hardly a small town or village favourably situated round the South-West coasts which does not offer accommodation in the way of hotels and lodgings calculated to satisfy any but an ultra-fastidious taste. It ought to be borne in mind, also, but it is often forgotten, that a great many invalids who may obey without protest the medical command for winter banishment, go away with pain at the heart, and continuously suffer whilst abroad all the pangs of home-sickness. They fret at separation from those near and dear to them, and this very often is enough to counteract all the good the change should do them. This feeling does not, of course, arise when patients of this type remain in England, where very often families may continue united, or the invalid may be, at least, within easy reach of a week-end visitor.

#### Bacteriology under the Hammer.

DISCUSSING various bacteriological appointments likely to be made under the Tuberculosis Prevention (Ireland) Act, we expressed the hope some weeks ago that such appointments should be made on terms suitable to the medical profession. In particular, we hoped that they would not be put up to be tendered for at competitive rates, like contracts to supply potatoes or to mend roads. So far, we have only observed two public bodies advertising for bacteriologists—the Corporation of Dublin and the County Dublin County Council. The latter has invited applications for the post, remuneration to be made at a certain fixed fee for each specimen submitted. The fee, though by no means generous, is not unreasonable when one compares it with the fees charged for similar work by the owners of clinical research laboratories. The Corporation of Dublin has, however, adopted what appears to us a much more objectionable plan. Candidates are requested to state the fees for which they are prepared to undertake certain specified investigations, such tenders apparently to have a bearing on their candidature. We presume that, as is usual in the consideration of tenders,

the lowest tender is not necessarily accepted, but we think the method of selection is nearly as bad as could be adopted.

### PERSONAL.

HIS MAJESTY THE KING has conferred upon Dr. de Mello Breyner, Physician in Ordinary to King Manuel, the Companionship of the Royal Victorian Order.

THE KING sent a number of pictures to the art loan exhibition opened in Lynn on the 19th inst. on behalf of the West Norfolk and Lynn Hospital. The Queen has sent exhibits from the art schools at Sandringham, and the Princess of Wales has lent several articles.

THE PRINCE OF WALES has sent a cheque for £50 towards the funds of the hospital. His Royal Highness is lending thirteen silver models of ships.

THE KAISER has sent a donation of £50 to the Seamen's Hospital Society ("Dreadnought"), Greenwich.

THE appointment of Medical Inspector of Recruits for the Aldershot Command has been abolished.

SIR W. T. THOMPSON, M.D., has been appointed Registrar-General for Ireland.

MR. V. WARREN LOW, M.D., B.S., F.R.C.S., has been appointed a surgeon at St. Mary's Hospital.

MR. R. MILLER, M.D., B.S., M.R.C.P., has been appointed assistant physician, also at St. Mary's Hospital.

THE directors of the Eye Infirmary, Glasgow, have appointed Dr. Arthur J. Ballantyne, surgeon to the infirmary, to fill the vacancy caused by the death of Dr. T. S. Meighan.

DR. PHILIP BAHR and some students of the London School for the Study of Tropical Medicine left for Fiji to study dysentery, on November 19th. The money for the expedition is being provided by the family of Lord Sheffield.

THE new balconies presented to the West Suffolk General Hospital, Bury St. Edmunds, by Mr. and Mrs. Washington Charters, and the out-patients' department were opened for use on October 23rd by Earl Cadogan, the hospital's president.

THE vacancy in the Skin Department at University College Hospital has been filled by the appointment of Dr. A. M. H. Gray, M.D., M.R.C.P., F.R.C.S., to be Physician for Skin Diseases.

SIR THOMAS BARLOW presided at the annual dinner of Past and Present Students of the National Dental Hospital on November 19th at the Trocadero Restaurant.

SIR HENRY W. NEWTON, who received his knighthood on the King's Birthday, was born in the year 1842, his father being a well-known medical practitioner in Newcastle. He is a "father" of the city council, having entered that body in 1866. He has been a sheriff of Newcastle, and has twice held the office of mayor.

THE Aston Guardians have decided on the suspension of Dr. May from the post of District Medical Officer. The gentleman in question disappeared from home mysteriously on October 15th, and we understand has not since been heard of.

MR. ERNEST WATT, M.D., D.P.H., senior assistant medical officer of the county and sanitary districts of Lanarkshire, has been appointed Medical Officer of Health for Partick, Superintendent of Knightswood Hospital, and Police Surgeon.

# A CLINICAL LECTURE

## ON

### THE EXAMINATION OF THE PERSON. (a)

By FRED J. SMITH, M.D.,

Physician, London Hospital.

GENTLEMEN,—I must apologise for taking you out of the ordinary routine of clinical medicine here, but the subject on which I wish to talk to you is one which you are not likely to pick up unless you do listen to a lecture on it. In your daily practice, what happens in 999 cases out of a thousand is, that a patient comes or is sent to you, and the first and immediate object is the voluntary examination of that patient. Therefore, it may never enter into your head that there are cases occurring from time to time, more in the case of police surgeons, in which that same examination is not, or may not be, a voluntary one. And I shall have occasion to tell you of one or two cases which are nothing more or less than a medical scandal, which might have been avoided if the doctor had taken the trouble to think of these things.

From a practical point of view, you may put down as a synopsis of the classes of case or subject on which voluntary or involuntary examination may arise. The medical man acting in his private capacity, or a medical officer acting in his official capacity (the distinction is a very important one), may be called upon to examine:—

(1) An adult male or female capable of giving consent.

(2) A child under age.

(3) A person incapable, for other reasons than that of age, of giving valid consent. And such person may be (1) in the custody of the police, charged with an offence or crime; (2) not in custody, perhaps, or not even charged, but suspected by the police; (3) not in custody, nor even suspected by the police, but suspected or charged by other persons, such as a master or mistress. And, lastly, civil cases arising in Court, such as divorce, chastity, rape, etc.

There is an important principle which I want you to appreciate, because it holds throughout all Courts of Justice; it is, that no one can be compelled against his will to give evidence against himself. This principle has been carefully safeguarded even in recent legislation, in which the prisoner can appear in the box. It does not compel him to go there, nor permit any inference to be drawn from the fact that, through his counsel, he declines to do so. In all cases where examination of the person is desired, it is, or should be, so desired because evidence bearing on the case may be obtained from it. It is clear that until the examination has taken place, it is impossible to tell in which direction, for or against, the results may go. So by close logical reasoning we get the following general proposition, and this is an admitted principle of law: that such an examination can only be made with the consent of the person concerned. If made without his consent, it is technically an assault, possibly an aggravated or even an indecent one.

The second great principle, resulting from this is one which I do wish to emphasise most strongly, because in some of your cases in general practice you are apt to be misled, and put into a very false position through not remembering it. It is absolutely *ultra vires* for a policeman, a coroner, a lawyer, magistrate, or even judge, or Bench of judges, to make a *valid order* for the medical examination of anybody's person. *A fortiori* it is *ultra vires* for a master or mistress. And it is possible from decided cases and the dicta of judges, to lay down further propositions concerning consent, viz.: the consent must not be obtained by fraud, nor by any undue moral pressure, nor duress.

It must be freely given, after a full explanation of the circumstances for which it is asked, and of the consequences that may result from it. Silence here does *not* give consent, nor is compliance to be taken as consent. Moreover, where such consent can possibly be doubtful, it is well that it should be given in writing; and in all other cases it should be given in the presence of disinterested witnesses. Otherwise, there may be a difficulty in proving it. In the case of those who, from age or limits of understanding are incapable of giving valid consent, it must be obtained from a parent or guardian. And lastly, and by no means least, your own consent; ask yourself if there are strong grounds for believing an examination is necessary for clearing up points which are vital to the case. Could you make your grounds convincing to a jury if you were charged with assault? A jury is a very ticklish body, and you require to have some strong reasons for asking for this examination. Remember refusal to submit to an examination is not necessarily an admission of guilt. For instance, a prisoner may be suffering from venereal disease and be unwilling that the fact should be disclosed, and yet may be innocent of the crime with which he is charged. If the complainant has venereal disease, too, this coincidence may as likely be false or true. And we may certainly say that an innocent woman is just as likely, if not more so, to refuse consent than is one who is guilty. Conversely, you must remember that a desire to be examined must not be construed at once into a proof of innocence. Men who commit a crime like rape and unnatural offences are frequently well aware of the importance of an examination as *prima facie* evidence in their favour, should it be negative; and it is surprising how often a criminal assault has been committed without leaving any trace upon the accused, so that your results are likely enough to be negative, even in the presence of guilt. When consent has been obtained, let the examination in all cases, without exception, be made in the presence of a third party. Neglect of this precaution has ruined more than one medical man of good repute, when examining school children in the absence of a third party. Let us proceed to substantiate these principles by cases, decisions, and comments.

First, with regard to police surgeons, medical officers acting in an official capacity. They may be desired by police officers to examine persons in custody, or who are suspected by the police. Or sometimes they are asked simply to aid in detective work when one of several persons might be guilty. I shall read what is the law on the particular subject. It is from the Orders issued to the Metropolitan Police on the medical examination of prisoners:—

"The Law Officers of the Crown have advised the Secretary of State that it is expedient that a medical examination of persons charged with such offences as rape should be made (but note the following four words), 'when a prisoner consents.' The complete list of offences to which this is applicable includes rape and all offences under the Criminal Law Amendment Act, 1885, and all cases in which the examination under this Order without the prisoner's affirmative consent seems likely to furnish evidence as to the prisoner's guilt or innocence. If the prisoner consents to such examination he is to be told that if he desires the attendance of a qualified medical man on his behalf, an opportunity for such attendance with the

(a) Delivered at the Polytechnic, Chelsea Street, W.C., on Thursday October 28th, 1909.

Divisional Surgeon will be given, and arrangements are to be made accordingly. An entry is to be made, and signed by the Inspector at the time of every proposal for medical examination, and of the fact of consent or refusal being given by the prisoner in his presence; also of the offer made to the accused to allow a qualified medical man to attend on his behalf, and of the fact that the accused accepted or rejected such offer; and such entry should be read to the accused person. If an examination is made, and a committal for trial takes place, the officer must attend the trial, and prove the consent. The Divisional Surgeon must make a separate entry in his private memorandum book of any examination; and he must be informed of the time and place where his attendance will be required to give evidence before the magistrate. By an examination carefully conducted under these rules, the innocent man cannot suffer, and such examination will often furnish cogent evidence against the guilty. This order does not interfere with the accustomed police or other search of prisoners charged with felony."

Apparently the search of a prisoner's clothing is on a different footing to search of a prisoner's person.

I would draw your attention to the fact that consent alone is considered. Refusal stops the whole proceeding at once. He must not be told that if he refuses it will be put up against him. He who steps outside the four corners of this document does so at his peril.

I will relate a case to you. It is, in a sense, astounding, not only for the case itself, but for the action of the police surgeon. It occurred only this year, and I had it direct from the man who did it, and I told him he ought to be ashamed of himself. It happened in the North of London. A child was, apparently, born in the street, from one of two women who were passing along. The child was taken in by a passing Samaritan, as, of course, there was the usual crowd. The two women disappeared. Next morning the police visited the house into which the women had gone. They were attracted to that house by a trail of blood. But when the police reached that house the women had disappeared. The police next traced them to another house; they sent for the police surgeon, and, on entering the house, and finding the two women, they requested the police surgeon to examine one of them—the elder was beyond child-bearing age. She was told, "If you do not consent, I shall take you into custody." Of course, the officer who used that threat, whatever his rank, ought to have been discharged from the force at once, and probably he would be if the facts were known to the higher authorities. The police surgeon thereupon examined her, and found her to be *virgo intacta*." Obviously there was a trick played on the police. The child was simply dropped there with blood ready prepared, because they wanted to get rid of the child. My criticism on the case is that it is difficult to know who was most deserving of blame—the police or the police surgeon, because both were violating every principle of justice and mercy, and even decency, there being nothing but circumstantial evidence, which turned out to be absolutely misleading, to connect the woman with what, at its worst, was a mere doubtful crime—concealment of birth. That is a shocking illustration, and was really what led me to think I could do a little good by taking this subject for a lecture.

In the case of prisoners under arrest for a crime, it is to be admitted that there is no unanimity of opinion amongst the English judges as to the necessity of obtaining consent before examining a prisoner, and at a trial in 1890 for murder following rape, Baron Huddleston laid it down that the police had as good a right to examine a prisoner's person as his clothes. But most judges are of a different opinion, and medical men will act wisely in being on the safe side. Justice Hawkins, at the Central Criminal Court, in 1890, severely censured a divisional surgeon of police for not cautioning a prisoner as to the result of the examination. Police surgeons are but only to a very small extent covered by their lay officers. That is to say, if a police inspector assumes full responsibility

for the thing, you might bring a little pressure to bear on the woman, but I would still have it in writing, from a divisional police inspector, that he would be responsible for everything that followed. A warning is especially needed by medical practitioners called in by private individuals to examine a maid-servant or other woman. When a domestic servant is suspected of being pregnant, the mistress generally sends for her medical attendant to make an examination, so as to confirm or rebut the suspicion. Medical practitioners summoned for such a purpose should be careful to explain to the mistress that such examination can only take place with the free consent of the suspected servant, and that compliance does not mean consent. The servant should be kindly and gently told what is her mistress's fear, assured that the examination is suggested in her own interest, and to clear up a suspicion which may be ill-founded, and told plainly that it is for her to decide whether she will be examined or not. I can give you some details of a case of that sort.

The plaintiff was a woman, *æt.* 28, and was housemaid in the service of Captain and Mrs. Braddell. Some time before the occurrence the Captain and his wife had been from home. In consequence of some information given by a charwoman to Mrs. Braddell, the latter came to the conclusion that the maid was pregnant, and told her to pack up and leave before 12 o'clock, as she was in the family way. The plaintiff denied that she was, and the mistress said, "The doctor will be here presently." He had been sent for, and the mistress told the plaintiff to go to her room. She cried, and Mrs. Braddell forbade her to speak, and shortly afterwards the doctor came to the bedroom too. She said she had never had such treatment before, and asked him what he was going to do to her, and said she did not wish to be examined. There was some conflict of evidence between the plaintiff and the doctor as to whether she had consented or not, which might have been avoided had the examination taken place in the presence of a third person. He found there were no indications of pregnancy, but, notwithstanding this, Mrs. Braddell dismissed plaintiff, and refused to give her a character. So she brought an action against master, and mistress, and doctor. The jury did not agree, and they were discharged, and the case was re-tried before Mr. Justice Lindley, and a verdict was given for the doctor, more by luck than management. The case was not allowed to rest there; it was taken to a higher Court, and again the doctor got the verdict. Justice Lopez, a high official of the law, expressed himself in the following terms:—"He considered that sending for a doctor by a master or mistress, and directing him to examine a female servant without first apprising her, in any circumstances was an arbitrary and high-handed proceeding, and it could not, in his opinion, be justified unless the servant's consent be voluntarily given. The submission under the idea that she had to obey her mistress was not consent, and she swore at the trial that she did not consent." Lord Justice Brett went on and said:—"I cannot conclude this judgment without expressing my abhorrence of the whole conduct with regard to this unhappy girl from beginning to end. I cannot conceive how right-minded people could presume that a young girl is in the family way, that they should immediately take it into their heads that they are insulted. Why on earth should they have sent for the doctor? If they did not like to keep the girl, why not let her go away as quietly as possible? This idea of having servant girls examined by doctors is, to my mind, absolutely wrong, and it is conduct which everybody ought to scout."

In 1871 a case of alleged infanticide occurred which places this question in a very unhappy light. A young lady, sister of a clergyman, committed suicide rather than submit to an examination by two medical men under an order of the coroner. He was holding an inquest on a baby, and ordered the medical man to examine the woman. It shows how necessary was that broad statement which I made at the beginning. Here was a coroner who, examining into the death of a child, deliberately writes out an order for the examination of the possible mother. These two doctors,



armed with this order, went to the rectory where the lady was residing, requesting an interview to ascertain whether she had had a child, but she refused to see them, and subsequently destroyed herself. I think those medical men and the coroner ought to have been had up for manslaughter. Dr. Lowndes, of Liverpool, took legal opinion, and the barrister whose opinion he sought reports as follows:—"After diligent search on the coroner's authority, I have no doubt that physical examination of the woman in the case of suspected infanticide is grossly illegal. Such a method of obtaining evidence is against our principles of justice, and I can find no authority for it anywhere. The coroner issuing such order is liable to damages in action." He goes on to say that whether any, and if so, what change in the law on the present subject is desirable, is doubtful, but the matter will be a very hard one to settle. That was written in 1871, and one can see that the position is being somewhat altered. Our present Government, and the late one, are rather inclined by grandmotherly legislation to take more care of the individual than he will take care of himself, with the result that we get a lot of Acts of Parliament now passed which involve this question, I will not say of infanticide or examination in suspected pregnancy, but which involve the examination of patients. Take the Workmen's Compensation Act, for instance. Unless the workman chooses to consent to the examination, he may lose his compensation entirely. And it might, for that matter, be a woman who had been damaged, and unless she consents to the examination under such circumstances she may lose all her compensation. And the Children Act of 1908, and all the various Acts under which school children are being examined, are illustrations of the fact that Parliament is rather assuming the right to insist upon examinations; but, until Parliament has acted, let me strongly advise you to be very careful what you do about examining anybody. There is another aspect of this infanticide question. A woman may consent to be examined, and it may be that the question of recent delivery arises. It may be known for a certainty that she had had a child, and she may admit that she destroyed it. *Per contra*, she may deny that she ever had one, and then you have to consider all the signs of delivery at more or less remote periods, and, as Dr. Taylor put it, it is just possible that examination of the dimensions of the pelvis might be necessary, because there may be a defence raised of protracted delivery, and consequently of dead birth. What I am chiefly concerned with now is to warn you against examination unless you have full consent.

Let us now take the case of males charged with rape and indecent assault. In the notorious case of "Bolton v. Parke," a London police surgeon received a rebuke from Lord Chief Justice Cockburn for having examined one of the accused without having first obtained his consent. The Judge told the prisoner he would have been justified in knocking him down. Dr. Lowndes, of Liverpool, says:—"Within the last twelve years I have been frequently asked to examine male prisoners charged with rape and indecent assaults. I have not only always made it a rule to obtain their free consent, but have added this caution: 'The result of this examination may be in your favour or it may be against you. In either case I shall be obliged to tell the truth. Do you still consent?' If the patient consents, and proceeds to undress himself, I have no hesitation in examining him."

Take the case of a man who had at the time a Hunterian chancre, and the girl upon whom he was charged with committing a rape was suffering from syphilis. Syphilis is extremely common, and the fact that a man charged with rape had syphilis is nothing extraordinary. So it is merely circumstantial evidence of very doubtful value. Many of these men know when they are in custody that the police surgeon will very likely appeal to be allowed to examine them; some of them will ask for examination. A man with gonorrhoea will deliberately pass his water about an hour before he knows an examination will occur, and so apparently free himself from any appearance of having gonorrhoea. If he has committed rape he may deliberately wash himself. This happened in the case of a collier who was charged with committing a rape; and he insisted upon being examined, and at the exam-

ination the only part of him which was found clean was his genitals—his legs were still black with coal. He was, of course, asked why he had washed his genitals, and those only.

#### EXAMINATION OF THE DEAD.

With regard to the performing of a post-mortem examination on a person, the law is that nothing further than the written order of a coroner is required, or, in non-judicial cases, the permission of the nearest relative or guardian. On the question of possession of a dead body, no property resides in a dead body, and, should a post-mortem be done without consent, no offence at law is, *ipso facto*, committed; it is only a moral offence against the relatives, which, of course, should be avoided. Removal and preservation of organs is no offence. One or two actions are on record of living persons claiming, by legal process, portions of their anatomy, and judgment has always been entered for the plaintiff.

If a patient dies, and you think you would like a post-mortem, there comes the reasons why you would like the post-mortem. I have put them down into four categories:—

(1) If it is obvious that the cause of death is a natural one, and the doctor wants a post-mortem for his own ends, the consent of a responsible relative or guardian must be obtained. If another relative objects, the medical man would act wisely by desisting. If he persists when there is objection, he is acting illegally when he forces access to the body against the authority of the master of the house wherein the body lies. The post-mortem examination itself is not illegal under these or any such circumstances.

(2) The second group is, that where the cause of death is doubtfully natural, and the medical man cannot clear it up without an autopsy. One of three courses is open to him: (a) The most unsatisfactory, but, withal, one which is often pursued: to swallow objections, and sign a certificate on a simple disease, and omit any mention of accident or foul play. Rumours in such a case may spread, all sorts of questions may be asked, and the medical man may be severely handled; (b) The second course is to explain fully to the responsible person the need for an autopsy, and obtain permission to perform it. He is fully entitled to perform it, because he is as yet uncertain whether an inquest will be necessary. If he has made the autopsy under these conditions, he must not suppress any facts which he has acquired. If he finds any evidence of unnatural death, he is bound to report the matter to the coroner. If, with the cause of death unknown, he is refused a post-mortem, he must report the matter to the coroner, and refuse to give a certificate. If once circumstances have arisen, whether before or after death, which necessitate report to the coroner, the medical man must on no account touch the body for the purposes of an autopsy without the written authority of the coroner. To do so without such authority is to render himself liable to be committed for contempt of Court. In 1904, a doctor named Carlton was summoned under the old Anatomy Act of 1832, for performing a post-mortem without permission. As a matter of fact his prosecutors found it was no good proceeding with the matter, that no jury would convict. The ground of their action was, that he, being a person lawfully qualified, did practise anatomy without having obtained a licence under that old Anatomy Act. So by performing a post-mortem in any case you are not committing an illegal act; you are not assaulting anybody. There is no property in a dead body, except on the part of the nearest relative, and it is only their property in so far as they must dispose of it without being a nuisance to their neighbours.

I trust now, gentlemen, that you will not go examining prisoners without their consent, and be very cautious about what you mean by "consent."

NOTE.—A Clinical Lecture by a well-known teacher appears in each number of this journal. The lecture for next week will be by John Bland-Sutton, F.R.C.S. Eng., Surgeon to the Middlesex Hospital. Subject: "On Appendicitis when the Vermiform Appendix is a Pelvic Organ."

## ORIGINAL PAPERS.

## THE STUDY AND TREATMENT OF ACUTE PERITONITIS. (a)

By PROFESSOR FEDERMANN, M.D.,

Of Berlin.

[SPECIALLY REPORTED FOR THIS JOURNAL.]

## PART II.

## TREATMENT.

GENTLEMEN,—If I now summarise all that has been said, and pass on to the treatment of peritonitis, it can scarcely be doubtful to you that a rational treatment of peritonitis can only be an operative one. With the present state of our scientific knowledge, we cannot expect to materially influence the infective process. If spontaneous recovery from a case of peritonitis takes place, the cause thereof lies in the favourable relationship between the infection and the resisting powers of the individual. Our internal measures can only at present obviate certain mischiefs and support the organism. In all severe cases of peritonitis this does not suffice. Up to now even serum treatment makes no exception to this.

The chances of operative procedures, however, are only favourable when they are carried out at a proper time, *i.e.*, in the early stage of the disease. Early operation is the greatest step in advance in the whole question of peritonitis. What do we mean now by early stage and early operation? There is still a great deal of uncertainty in regard to these two questions. This depends on the fact that there is at present no exact definition of this epoch of the disease, neither for any individual form of the disease, still less as regards peritonitis as a whole. The early stage sometimes passes unnoticed, sometimes with violence into the intermediary stage, or, in the grave perforative form, direct into the last stage. As we cannot define it distinctly, either anatomically or clinically, only a biological definition is appropriate that best hits the centre point of the matter. We can say that a peritonitis is in its early stage so long as the resisting power of the organism has not passed beyond certain limits. In practice we must always bear in mind that the duration of the early stage must always vary according to the severity of the infection, and that it lasts the shorter time the severer the infection, and the longer the milder it is. Thus in a case of perforation of the stomach the early stage has passed within twelve hours, whilst in a case of appendicitis of medium severity early operation may be performed on the third day with good chance of success. In general I might take 36 hours after the commencement of the first marked signs of the disease as the highest limit, at least for the majority of cases, at which an operation may be carried out with any probability of success, but I would emphasise that in a class of cases—and above all in perforations of the stomach and intestines—the operation must be done within the first 12 hours. Otherwise it can only be done in the presence of severe complications, or we come too late altogether. It will be understood that the above will be demanded only when the histories are very exact, above all in little children in whom, as experience has shown, often only a very slight illness means the commencement of an attack of peritonitis.

If we are in the fortunate position of being able to operate in the early stage of an attack, the chances are excellent, and from that point of view the operation is one of the most satisfactory in the domain of surgery. Whoever has been present at an early operation and has seen how a condition dangerous to life has been changed at a stroke by a rapid and slight procedure, will agree with me in feeling convinced that our mode of treatment has been the correct one, and will be satisfied with it.

Operation in the early stage has essentially two demands to fulfil: to do away with the point of origin of the infection, therefore to remove a diseased

organ or to close up the opening of a perforation; and, secondly, to clear away any exudation that may be poured out, and by conducting it permanently outside prevent the further absorption of poisonous material into the blood. We can accomplish both these aims in a manner simple, sparing to the patient, and without danger. Extensive incisions and counter openings are superfluous; the incision may be closed up to a small opening for a drain. The operation is without danger itself, as the resisting powers of the patient have not been weakened, that of the peritoneum has been enormously increased, so that infection of the healthy peritoneum rarely occurs, or is easily overcome. In this lies the secret of the success of early operation. For this reason it must be emphasised again and again that the diagnosis must be made within this limit of time, and we must not rest before then.

But it is not every case of peritonitis that requires operation in the early stage. Under all circumstances it is indicated in all cases of perforation, whether of the stomach, intestines, or any other organ. True perforative peritonitis only very exceptionally leads to circumscription, and without operation goes on rapidly to death. And withal the early stage passes so immediately into the later one, with its most unfavourable prognosis, that we cannot operate early enough if we would obtain favourable results. How often have I seen a perforation of the stomach in a hopeless condition even within 12 hours! I need not express myself as to the characters of a case of perforation in the later stage, nor tell you that it is always hopeless. Prostration, extinction of all reactive expressions is its sign. Low temperature, disappearing leucocytosis, small galloping pulse, meteorism from paralysis of intestines, uncontrollable vomiting, a feeling of euphoria, leave no doubt as to the diagnosis and prognosis. Exceptionally, operation still helps; the organism succumbs to the poison so freely absorbed. May we never allow it to get to that stage.

In diffuse gonorrhœal peritonitis early operation is unnecessary, as I have frequently observed, as it is capable of spontaneous recovery (Barth, Martin, Fowler). But the recognition of it is not easy, as it has a stormy onset with severe symptoms. If there is a suspicion, but without certainty, that a case is of gonorrhœal origin, a diagnosis must be made by exploratory puncture through the posterior vaginal arch. A quickly made dry preparation shows the presence of gonococci, or their absence.

Amongst the forms of peritonitis appendicitis takes a special place, which receives its peculiar and special stamp from participation on the part of the peritoneum. For this reason it is deserving of particular mention, as in it the accompanying peritonitis is of all kinds, from the simple fibrinous to peritoneal sepsis. We distinguish only an appendicitis simplex, without participation in the peritoneum, or with sero-fibrinous peritonitis, and appendicitis destructiva (gangrenous, perforating) with purulent peritonitis. These two groups can almost always be diagnosed and kept apart, from the clinical symptoms. In simple appendicitis the pain on pressure is almost always limited to the right side; the number of leucocytes does not exceed 15,000. All the symptoms are moderate in degree, and distinctly recede, even after 24 hours. In simple appendicitis I consider a waiting attitude to be justifiable, and early operation to be unnecessary, as the affection soon subsides spontaneously. I well know that a simple appendicitis can change about suddenly, but on the one hand, according to my own experience, this is an extremely rare occurrence—for the most part the case has not been observed properly—on the other these cases should decide us to watch even the mildest attacks with great attention, so that we can operate on any unfavourable turn.

Destructive appendicitis, however, with purulent peritonitis, at the bottom of which there is always either gangrene or perforation of the appendix, should always be operated on within the first 36 hours; that is, treated like any other peritonitis. The clinical symptoms correspond to those already described, and may almost always be distinguished from those of

(a) An Address delivered before the Charlottenburger Aerzteverein.

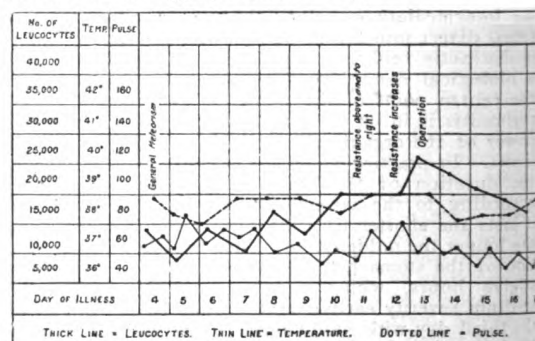
simple appendicitis. In destructive appendicitis the peritonitis is always diffuse from the first, and we can never say with certainty beforehand whether or nor encapsulation will take place. For this reason we should not wait and put off the favourable moment for operating. Even in those cases that proceed to abscess formation secondarily, there is no object in waiting for this event, nothing is gained, and time and strength are thrown away. Early operation in which the small incision can be almost closed by suture, is better than a big, objectionable incision into an abscess. We shall not go out of our way to decide whether the peritonitis will become encapsulated in a case of appendicitis; such a decision is almost impossible at the commencement, and it is also of no importance, but limit ourselves to separating the two chief groups, which is almost always practicable. And if at last we lean to the radical side, operate in doubtful situations, when only one symptom is present that causes anxiety, in my opinion—and in that of many surgeons—a practical position will have been taken up as regards the treatment of acute appendicitis.

But however agreeable it would be to get all cases of appendicitis in hand within the first 36 hours, in practice this ideal is hardly within reach, in a great town; at present we see quite enough cases that have been ill three and even four days, or even more. The conditions these cases present are quite different from those in the early stage, and as you know essentially worse. The operative mortality in appendicitis from the second to the third day rises from 4 to 40 per cent. However, we must take the cases as they come, and endeavour to find a therapeutical standpoint, even as regards the late ones. There are cases of appendicitis that are in the last stage even on the third or fourth day, where all treatment is useless; but it is not these cases that I have in my eye. They are lost, and the kind of treatment is a matter of indifference. But there are cases of medium severity with the peritonitis progressing slowly (at an earlier stage progredient fibrino-purulent peritonitis) that do not pass immediately from the first into the final stage, but run a middle course, that has been called the intermediary stage. This so-called intermediary stage is only met with in appendicitis; its duration varies with the severity of the case; it may under certain circumstances last for a week. The anatomical condition is a varying one, but there is always a diffuse purulent exudation of various extent, with soft adhesions. Clinically, these cases are distinguished by the excessive diffuse meteorism from paralysis of the intestines, with diffuse tenderness on pressure. There is no circumscribed resistance. The general symptoms, pulse, temperature, leucocytosis, are all thoroughly typical. The organism is in such exact equilibrium that the slightest weight on one side or the other will pull that scale down. The end is either circumscription, *i.e.*, an abscess forms, when the patient is generally saved, or the peritonitis progresses unrestrained till death takes place.

How shall we act in such cases? I can indeed say that the decision in such cases forms one of the most responsible and difficult questions in the whole domain of the treatment of peritonitis, and that every symptom must be again and again compared and carefully weighed. If any resistance is perceptible the case decides itself, and we must wait until the limitation becomes definite. But in the typical cases there is no resistance. Shall we here operate at once so as to bring the disease to a standstill, or shall we wait in the hope that the diffuse inflammation will proceed to localisation? There are surgeons who operate in all such cases in this stage; the majority do not, they treat the cases individually. In my experience many a case has fallen a victim to operation, as the operation is no longer free from injury and danger, as it was in the first 48 hours.

If a comparison of all the symptoms—particularly the character of the pulse—gives a satisfactory picture of the state of the system, this is mostly incomplete as a guide for operative procedures. There is no sharp reaction that will enable us to judge of the patient's

resisting power, and so of the prognosis. I believe, however, that we have in the examination of the blood a means of filling up this gap. So long as the number of leucocytes is still high, 20,000 or over, it is proof that the resisting power is still sufficient, and therefore favourable in view of operation. All the cases that I have operated on in the intermediary stage, when the leucocytosis has been high, have recovered—naturally with complications quite often. But if on the third day or later we find a low leucocytosis, 15,000 or under, I take it that operation is contra-indicated for the moment, as the patient's powers have become so exhausted that operation will only hasten the end. I have never seen a case of purulent peritonitis operated on with a low or falling leucocytosis that recovered—whether the vermiform appendix was removed or not. In these cases we must rather endeavour so to raise the resisting power of the organism that the disease may become circumscribed. The best means for this are permanent infusions of saline solution into the rectum, several litres a day; they are well borne, and they are an excellent reinforcement for combating the infection. Opium should be rejected, as it checks peristalsis and masks symptoms. I know a number of cases in which there was apparently no prospect whatever of recovery, in which under this treatment the disease became localised, the leucocytosis improved, and an abscess formed that was incised. Recovery is almost assured by this. I might permit myself here to show a typical cure of such a case that came under treatment in a desperate condition, with a leucocytosis of 13,000, and general meteorism. Not until the eleventh day was there any distinct resistance in the upper part of the abdomen—a certain sign that there had been general diffuse inflammation—it became larger, and on the thirteenth day an incision was made into an abscess the size of an apple, with recovery.



If an abscess is distinctly to be felt—and it will be found above all in Douglas's pouch—it should be opened: the appendix is, however, not removable as a rule, as an opening into the free peritoneum must be looked on as highly dangerous at this stage. In a number of cases that under operation would offer a very unfavourable prognosis, the disease may be arrested, and limitation and recovery led up to. This is especially to be emphasised as regards those who desire to operate on every case in this stage.

Gentlemen, I am at the end of my task, and I am well conscious how many gaps there are in what I have offered you in this interesting and important subject—in the still numerous questions to be solved. The short hour that was at my disposal explains this. I intended to draw you a picture of the development of peritoneal inflammation, how in its principal features it runs the same course in all forms, and to show you that we can only then have certain successes, when we recognise the disease in all its stages—and above all in the very first—and are in a position to judge of its importance—its dignity (Dignität). Only the careful collaboration of internists and surgeons will be able to reduce the mortality of the disease to a minimum. The general practitioner sees the patient first, and in his hands, in the first instance, lies the fate of the patient.

## THE TEACHING OF PRACTICAL MIDWIFERY IN THE PAST AND AT THE PRESENT TIME. (a)

By HENRY JELLET, M.D., F.R.C.P.I.,

King's Professor of Midwifery in the School of Physic, Trinity College, Dublin; Gynaecologist to Sir Patrick Dun's Hospital, Dublin.

THE subject which I have selected as the basis of my introductory address is one which has been prominently before the various bodies interested in medical education during the past couple of years, and which has also been the subject of an important debate in this Section of the Academy. I propose to refer to the official regulations which have existed for the teaching of practical midwifery in the past and in the future. The members of this Section labour under no delusions as to the importance of this subject. They see daily both in their hospital and in their private practice the results of its neglect in the past, and many of them have worked hard to effect improvement. It is only too obvious, however, that the bulk of what may be called the governing bodies of the medical profession have taken a long time to appreciate the needs of, and for, a thorough practical education in midwifery and gynaecology, and though that lack of appreciation was more marked in the past—as I think my address will show—it is still existent. So far as my own experience goes it seems to me that gynaecologists and obstetricians are able to take a broader and saner view of the relative importance of subjects in the medical curriculum with which they are not personally concerned, than is the physician or the surgeon. It is only a short time ago that, during a discussion on the teaching of midwifery, a prominent medical man decried the necessity for improving it, and pointed out that already more time was devoted to the teaching of it than to the teaching of diseases of the eye, while, said he, all humanity have two eyes, whereas only a part of it has one uterus. Nor was he willing to accept the fact that the general practitioner—for one eye case which he meets which cannot wait for the services of a specialist—meets, I suppose, twenty cases of labour, whose safety and future welfare are entirely in his hands.

It may be said that this is only the special pleading of a specialist for his own speciality. But what specialist has ever yet advocated the extension of obstetrical and gynaecological teaching beyond the degree required by the general practitioner? All our complaints have been directed against the fact that, while it is the object of all medical education to turn out not specialists but general practitioners, education in one of the most important branches of general practice was neglected and almost reduced to a farce. It is not so long since the General Medical Council considered it sufficient education in practical obstetrics if a student attended twelve cases of labour, of which he was to conduct three personally under the supervision of any registered medical practitioner. When efforts at reform were made, the upholders of such a system openly expressed the view that the student as regards midwifery must obtain experience after qualifying "in the same manner as he does in respect of medicine and surgery." If the subject of midwifery was comparable in its extent with a single disease, such for instance as typhoid fever, then the argument might have some weight, since students must perforce go out with only a scanty practical knowledge of individual diseases and acquire a fuller knowledge later. But can such a comparison be made? Is it not more correct to compare midwifery with a group of diseases, such for example as the diseases of the thorax, and what clinical teacher would suggest that it was sufficient for a student to examine three cases of thoracic disease in order to acquire a general practitioner's necessary knowledge?

In the Spring of 1888 the General Medical Council

(a) Presidential Address delivered at the Opening Meeting of the Obstetrical Section of the Royal Academy of Medicine in Ireland, Nov. 5th, 1909.

received a report from their Education Committee, and one part of this dealt with "the importance of increased attention to general and special clinical work." We are only concerned with one of the several recommendations brought forward by the Committee, and this was to the following effect:—

"That every student should be required either to attend for three months the indoor practice of a lying-in hospital, or to have been present at not less than twelve labours, at least three of which he should have conducted personally under the direct supervision of a registered practitioner." An amendment to the effect that the number of labours to be attended by the student should be increased from twelve to twenty was rejected, and the recommendation of the Committee was adopted, thus rendering it possible for a student to be qualified to practice midwifery after he had personally conducted three cases of labour under the supervision of any medical practitioner.

In 1891 the teaching of midwifery again came before the General Medical Council as a result of a motion moved by Dr. Glover, and seconded by Dr. Athill, to the following effect:—

"That it is urgently necessary for the examining bodies to require of candidates for their diploma additional guarantees of their practical education in obstetrics; and that candidates at the final examination be required to produce proofs that they have personally conducted at least six, and have been present at at least twenty-four additional labours, or of having attended as pupils for six months a lying-in hospital, or the lying-in department of a general hospital, or a maternity institution, with arrangements for clinical teaching approved by the examining body granting the diploma."

This very moderate proposal was defeated by an amendment which whittled it down a little, only to be itself defeated by another which still further reduced it. Finally, the opponents of any reform considered they were sufficiently strong to move that the Council resolve to adhere to its existing resolution, and this was carried, and the *status quo* maintained.

In the winter session of 1895, the General Medical Council received a petition from the Council of the British Medical Association to the effect that the members of the Association viewed with deep concern and regret the admission of students to their final examination after they had personally conducted only three and been present at only nine confinements. The Council of the Association therefore petitioned the General Medical Council to recommend that no student be admitted to his final examination until he proves that he has personally conducted at least thirty confinements under the direct supervision of a medical practitioner. This proposal removed some of the farcical elements of the existing state of affairs, but, inasmuch as it recognised any general medical practitioner as a suitable person to teach practical obstetrics, it would have failed in its object. The petition was received by the General Medical Council, and referred to the Education Committee for consideration and report, a step which was at least a recognition that the existing state of affairs was not perfect, and so was a great advance on the action of the Council in 1891.

The Education Committee, so far as one can judge from the report presented to the Council, gave the matter a very careful consideration, and, though it is impossible to recognise their resultant recommendation as anything but insufficient, it is evident that they had to contend against very serious opposition to any step for the improvement of midwifery teaching. The inevitable compromise resulted, and while students were to be allowed to put in a three months' attendance at a midwifery hospital if they wished, they were also to be admitted to examination after being present at not less than twenty labours, at least five of which were to be personally conducted under the direct supervision of a registered medical practitioner. This recommendation was adopted by the Council, and remained as their recommendation to the licensing bodies until the adoption in 1907 of

the series of resolutions to which I shall now refer, and which signalled the advent of an entirely new system in the teaching of practical midwifery.

At the May meeting of the Council in 1905, on the proposal of Sir John Williams, it was resolved to appoint a Committee of the Council to inquire into the operation of the rules regarding the midwifery practice required of candidates for medical qualifications. This reference covered a wider field than any previous reference made to any Committee appointed to inquire into the teaching of practical midwifery. The Committee, which had reported in 1895, had been limited in its scope to inquiry into the attendance by the student on cases of labour under the supervision of a medical practitioner. The reference to the present Committee covered the whole teaching of practical midwifery.

With the object of obtaining information on the subject a series of questions were sent by the Committee to "the licensing bodies, which include teaching institutions, and to other teaching institutions which are recognised by the licensing bodies for subjects other than those of the first year's course." In this respect I think that so far as Ireland, at any rate, was concerned a mistake was made, inasmuch as many of the questions asked came within the purview of the teaching midwifery hospitals rather than of the licensing bodies, who were unable to answer several of the most important. It is impossible here to enter into the different questions asked, but one question and its answers may be mentioned:—

Question.—What proportion of your students "attend for three months the indoor practice of a lying-in hospital" as an alternative to not less than twenty cases of labour?

Summary of the answers received from 37 institutions.—In eleven schools none of the students attends for three months the indoor practice of a lying-in hospital "as an alternative to twenty cases of labour"; and of those in ten others practically none does so. About 50 per cent. of the students in one school take the alternative. Almost all the students in six schools take the three months hospital course.

So far as I can judge from a perusal of the replies received by the Committee, the taking of a hospital course was a matter of the greatest rarity in any but in the six schools last mentioned, and, in almost all the others, students acquired their knowledge of obstetrics by being present in fact, or in theory, at twenty cases of labour of which they personally conducted five under the supervision of a general practitioner. Further it appears, and the Committee in their report emphasise the fact, that in the majority of schools even the minimum requirements of the Council were not complied with. It is no wonder then that the Committee went on to report that "it seems obvious that, even if the course of study recommended were in itself sufficient, since its requirements are not complied with, there is no evidence to show that persons obtaining qualifications possess the required knowledge and skill for the efficient practice of midwifery."

The recommendations of the Committee were subsequently twice altered before their final adoption, and so I do not quote them in full. They laid down for the first time three important principles which persist in those finally adopted. These were—

(1) That the student must have received adequate instruction in medicine, surgery and midwifery before beginning the study of practical midwifery.

(2) That he must have attended the indoor practice of a lying-in hospital or of a general hospital or poor-law infirmary having lying-in wards, before he is permitted to conduct extern cases.

(3) That the certificate showing that he has conducted the necessary number of cases must be signed by a member of the staff of one of the institutions mentioned in (2), thus doing away once and for all with the system of fortuitous instruction by any general practitioner who might or might not be suited to impart it.

This report came in May, 1906, before the General Council, who ordered it to be sent to all the licensing bodies and teaching institutions, inviting criticism

thereon. The criticisms received were then considered by the Committee, and, as a result, certain minor changes were made in their recommendations. The consideration of the Committee's report by the Council was, however, postponed in order to give various bodies which had not already replied an opportunity of doing so, and, in consequence of these replies, some further alterations were made in the recommendations. Finally, in May, 1907, the General Council adopted, almost unchanged, the recommendations of the Committee, with the result that, on paper at all events, a very definite and practical effort was made radically to improve the teaching of practical obstetrics.

I trust I have not wearied the Section by this dry *présis* of the past history of the teaching of practical midwifery. If I have not, I should now like to say a few words on the probable effect of the recommendations of the General Medical Council on the future of such teaching. The recommendations of the Council are only recommendations, and, as such, can be ignored in part or in whole by the licensing bodies. Some idea as to the probable attitude of the latter can be gleaned from their criticisms of the first Report of the Practical Midwifery Committee of the General Medical Council, and in these criticisms there is manifest an extraordinary divergence of opinion. The majority of the London Medical Schools consider it quite impracticable to insist on regular attendance upon the indoor practice of a lying-in hospital. The majority of the Scottish licensing bodies, and of the English Universities, and all the Irish bodies, view the proposal with approval. The University of Manchester expresses "unqualified approval of the recommendation that certificates of attendance on labour shall be accepted only from a member of the staff of a public lying-in hospital, or of the maternity charity of a general hospital." The University of Birmingham considers that "general practitioners should not be altogether excluded." The Professor of Midwifery at Bristol University College considers "that practitioners who have received their education in lying-in hospitals only are not so reliable as those who have been taught in an extern maternity." The Professor of Midwifery in St. Mungo's College, Glasgow, is "of opinion that a student will learn more by attending in the wards of a hospital and seeing cases properly conducted than by attending scores of cases in their own homes." These are only a few instances taken at random, but they serve to show the differences that exist. It is probable—indeed, almost certain—that the large Universities whose supply of students is constant and independent of minor alterations in the curriculum, will adopt the recommendations of the Council in their entirety, while licensing bodies who are, so to speak, competing against one another for students, will endeavour to present their curriculum in as attractive a form as possible. Similarly, the schools which consider the recommendations impracticable will doubtless continue to do so, until the licensing bodies, to which the schools act as feeders, demonstrate their practicability by making them essential.

Here, in Ireland, we are principally concerned with the actions of the Irish Universities and licensing bodies, and, so far as I am aware, the Conjoint Board of the Royal Colleges have so far alone modified their regulations. Their alterations are thus of considerable interest as foreshadowing to some extent the possible action of other bodies.

Before referring to them, it is necessary to state that for many years past in Ireland the regulations for the teaching of practical midwifery have been sufficient, if the student chooses to benefit by them. Instead of its being possible to become qualified after seeing 20 cases of labour and conducting 5, the Irish student had to attend for six months in a maternity hospital, and to conduct some 20 cases. I emphasise this point because there is a danger present that the efforts of the General Medical Council to produce a leavening up of midwifery teaching in England and Scotland may result in producing a leavening down in Ireland, and, indeed, we shall see that, in the case of the Irish Colleges, already it has been decided to reduce the



course in a maternity hospital from six to three months in order to bring it into closer conformity with the recommendations of the Council.

The regulations of the Colleges, which have been agreed on after a prolonged discussion, and which will shortly come into force, are as follows:—

(1) Every student before beginning the study of practical midwifery must have attended a course of lectures on midwifery, and must have held the offices of clinical medical clerk and of surgical dresser.

(2) Every student must attend the indoor practice of a lying-in hospital, or the lying-in wards of a general hospital, for a period of three months, to the satisfaction of the medical officer in charge, and, after having received therein practical instruction in the conduct of labour under the personal supervision of a medical officer, must attend twelve cases of labour under official medical supervision.

(3) Every student must attend on at least thirty-two occasions on the regular clinical instruction delivered in the wards of a lying-in hospital, or in the lying-in wards of a general hospital.

(4) All certificates testifying that the student has complied with the above regulations must be signed by a medical member of the staff of a lying-in hospital, or by a medical member of the staff responsible for the management of the maternity wards of a general hospital.

The foregoing regulations are admirable in many respects, but in one particular they are retrograde. It was unwise from every point of view to reduce the course of hospital teaching from six to three months. It was unwise from the point of view of the student's education, because a three months' period is insufficient, and it was unwise from the point of view of his comfort, because it would be easier for him to obtain the necessary number of cases and the necessary hospital attendance in a period of six than in one of three months. On the other hand, it is most important to have obtained a definite pronouncement that the student must attend at the regular clinical instruction delivered in the wards of a hospital.

What the action of the other Irish licensing bodies may be remains to be seen. I trust that it will be in the direction indicated by the regulations of the Royal Colleges, but that there will be no shortening of the periods of hospital attendance. It is for the Irish school to improve and to increase its present standard, and not to let itself forget that what may be improvement in other teaching centres may be retrogression in Ireland.

There is just one other point to which I wish to refer before I finish. The General Medical Council, in their final recommendation to the licensing bodies, added to the recommendations already mentioned another to the effect that it is necessary for the licensing bodies "in the public interest" to establish clinical and practical examinations in midwifery and gynecology in connection with the qualifying examinations. At first there was considerable uncertainty as to the practicability of such a scheme, but when it was examined closer it was found to be quite workable. Trinity College and the Royal Colleges have already adopted it, and in future all their students will have to present themselves for such an examination. Its value, if it is properly carried out, is undeniable, and it remains with the examiners to see that the examination is a reality.

If we contrast the present state of affairs with what existed in 1888, we shall see what a great advance there has been in the teaching of practical midwifery, and this Section of the Academy, as a Section, and many of its members individually, have had a large share in this. In 1888, it was impossible for any student, who merely followed official requirements, to acquire a sufficient knowledge of obstetrics before he was qualified to enable him to undertake the care of the average case of labour. At present, under the new regulations, it is possible for most students to obtain the necessary knowledge. It must be the object of the future to ensure that it is impossible for him to become qualified without such knowledge.

## ON SOME RELATIONS OF PHYSIC TO PHYSICS, AND THEIR BEARING UPON THERAPEUTICS. (a)

By WALTER G. SMITH, M.D.,

Ex-President of the Royal College of Physicians of Ireland.

IN the desultory remarks which I offer to you this evening, I will assume that the term physics includes chemistry. For it is evident that physics, no longer content with the molecule, has now annexed the sacred atom of the chemist.

The atomic theory has scarcely passed its centenary, and yet we have already become familiar with phenomena which prove that the immutable and indivisible atom of the nineteenth century has lost these attributes. Chemistry, while its ordinary practical course is untouched by the new revelations, has come to recognise that the atom is a microcosm in structure, and conceals an amazing storehouse of energy, electrical in its nature.

In the early dawn of medicine, theology and therapeutics—the former spelt with a big T—were closely interwoven. By degrees the ill-assorted alliance has been severed, and, in later days, all earnest cultivators of medical science have done their best to emancipate it from the thrall of superstition and of mere dogmatic authority.

This is the true Renaissance of Medicine, and the spirit of free inquiry, or moderate doubt, is the distinctive feature of modern thought. We can the more truly reverence the great fathers of medicine, Hippocrates and Galen, although we do not bow down and worship them as was done for many centuries. In our own times we witness the rash endeavours of certain clerics, in America and elsewhere, to re-engage in practical therapeutics, and, with the self-assurance born of ignorance and conceit, they intrude where they ought not, and meddle where they can do nought but mischief. As Osler ("The Treatment of Disease," *Brit. Med. Journ.*, July 24th, 1909) aptly quotes from Fuller:—"Circe and Æsculapius were brother and sister, and the wiles of the one are very apt to entrap the wisdom of the other."

Homœopathy had for a time a sickly existence, and has nearly perished of inanition. But its vacant throne is, in part, occupied by that audacious fraud and moral influenza, yclept Christian Science, a pursuit the "Christianity" of which is as *bizarre* as its "science" is contemptible. A woman lately died at Worthing who had been suffering from consumption for five years. At the inquest it was stated that she had been in the hands of Christian Scientists, who charged her a reduced fee of five shillings weekly for praying twice daily. The regular fee was £1 1s. (*Irish Times*, September 14th, 1909.) To Christian Science may be fitly applied a "bull" once perpetrated in the House of Commons—"It is a lie, sir, and it is high time we nailed this lie to the mast."

It might be supposed that, with the advance and spread of scientific knowledge, quackery and superstition would die out. Yet the experience of the ages teaches that man has an ineradicable hankering after the unknown and the unknowable, and is ever ready to pin his blind faith to the incredible and the marvellous.

Man is, by nature, an idolater, and he revels in that greatest of all human capacities—the capacity for self-deception (Osler).

While we gladly allow that chemistry has made magnificent contributions to our stock of remedies, the very facility with which organic syntheses can be effected has its disadvantages.

Of the innumerable new remedies which are daily showered upon us, most of them are like falling stars which flash across our path for a moment, and leave behind not even a speck of therapeutic dust. A few, like meteorites, cling to earth and become part of our possessions.

We are ready also to admit our obligations to the pharmaceutical skill of the great drug firms, but they now presume, under an ill-disguised humility, to teach us our business, and, by their commercial wits, they

(a) Presidential Address at the Opening Meeting of the Section of Medicine of the Royal Academy of Medicine in Ireland, October 29th 1909.



batten upon the witlessness of the public—lay and medical.

They invade us in our consulting hours at home, and bombard us with their pseudo-scientific missiles—heralded by a flourish of fearful chemical formulae, and so degrade the progress of real therapeutics to a vulgar commercial competition.

"Where is boasting, then? It is excluded."

Let us turn now to other thoughts.

An analogy may be traced between the parallel courses of modern physiology and modern chemistry.

For a time the investigations of physiologists ran largely on systems and tissues; those of chemists on systems, groups, and types. During recent years the tendency in each is to return to the closer study of their respective units. That is to say, the cell for physiology, the atom for chemistry and physics. In each case the unit turns out to be a highly complex structure, with infinite potentialities, and the atomic hypothesis plays the leading part in the physical science of to-day.

The two great laws which serve as beacon lights in the investigation of natural phenomena are the generalisations known as the laws of thermodynamics—

(a) The principle of conservation of energy—the first law.

(b) The doctrine of the transformations, or degradation of energy—the second law of thermodynamics.

These two principles are obeyed throughout the whole range of organised Nature, and, as Benjamin Moore shows so clearly in his interesting and suggestive articles in "Recent Advances in Physiology and Biochemistry," the living cell is an energy machine or transformer.

To comprehend and follow these exchanges of energy is largely, for biologists, the task of the new branch of study termed physical chemistry, which may be regarded as the product of the cross-fertilisation of physics and chemistry.

So far as we can ever hope to penetrate the mystery of life, it is surely only by the aid of such inquiries and experiments. This was dimly perceived and felt by the older seekers after truth, as is seen in the gropings of iatro-mechanics and iatro-chemistry in the seventeenth and eighteenth centuries.

Methods of physico-chemical therapeutics—e.g., massage and hydrotherapeutics—reach back to antiquity, and one of the earliest recorded examples of hydrotherapeutics is related in the story of the cleansing of Naaman's "leprosy."

In my address to this Section last year upon "Baths and Mineral Waters," I attempted a brief and inadequate sketch of the physico-chemical principles which lie at the foundation of scientific balneology. If we were to take seriously the claims of the proprietors of the different mineral waters, they would have us to believe that each spring is a veritable pool of Bethesda. But the pool needs to be stirred with the rod of science.

In Starling's recent book on "The Fluids of the Body," we have an exposition by a master-hand of the physico-chemical factors which appear to govern the intake, the output, the distribution, and the exchanges of the body liquids. Chemical changes are at the root of all life, and if we seek for a criterion of animate substance we find that metabolism is the distinction between living and lifeless substance.

The possession of the highly complex protein molecule is a definite mark of distinction of the living organism as contrasted with all inorganic bodies (Verworn, *Allgem. Physiologie*, 1909).

Chemical energy is the source of all other forms of energy in the organisation. By its transformations are derived mechanical energy, light, heat, and electricity.

In chemistry, as pointed out by H. E. Armstrong, everything tends to show that function and structure are most closely connected—odour, taste, colour, physiological effect, are specific rather than general properties, each conditioned in its special variety by some special structure (Presidential Address to Section B. Chemistry, at the British Association meeting in Winnipeg, 1909).

The influences of changes of temperature upon the phenomena of life are obviously of high significance, and they have a practical interest for physicians in connection with the pathology of pyrexial affections.

We have learned that the range of temperature compatible with preservation of life is far greater than was formerly thought. The very surprising fact has been established that the living substance of the cells of animals so high in the scale as fishes and frogs can be frozen into ice without losing its capacity for restoration to vital activity.

As for bacteria, Macfadyen has shown that a temperature of  $-252^{\circ}\text{C.}$ —i.e., only  $21^{\circ}$  above absolute zero—failed to destroy the life of certain bacteria even after ten hours' duration of the experiment. Conversely, he has also shown that there are "thermophilous" bacteria, whose optimum lies between  $50^{\circ}$  to  $65^{\circ}\text{C.}$ ; and some cultures will grow at a temperature of  $72^{\circ}\text{C.}$  ( $161.6^{\circ}\text{F.}$ ).

The equilibrium point of a metabolic process can be shifted by alterations of temperature. Take, for example, the potato.

The conversion of starch into sugar is an exothermic reaction—i.e., is attended with extrication of heat. Therefore, in accordance with v'ant Hoff's principle of mobile equilibrium, a rise in temperature will favour the reverse, or endo-thermic process—i.e., the regeneration of starch. Below  $5^{\circ}\text{C.}$  sugar is formed in a potato from starch; if the temperature rises starch will be re-formed from sugar. Similarly, evergreen leaves are, in winter, often free from starch, but contain grape sugar. If brought into a warm room, the sugar vanishes and starch takes its place (Höber, *Physikal. Chem. der Zelle und der Gewebe*, 1902).

So we see that cell physiology is the very root and basis of all physiology, just as atoms are the foundation stones of chemistry.

Calorimetry, coupled with metabolic investigations, leads to the deduction that the energy expended by the body can be quantitatively accounted for by the stores of potential energy contained in the food.

Where, then, is there room for that mysterious *vital force*, or *vital energy*, or *biotic energy* (B. Moore), which, like Melchizedek, has neither father nor mother, and which has so long dominated and enfeebled physiological thought. How do we gain by using a hazy conception expressed in an indefinable word?

The doctrine of the "vital force" is really only a mythological way of expressing the amazement which the unique character of organic phenomena excited (Höfding, "Outlines of Psychology," 1908).

When we say that physiology is and never can be taught else than the physics and chemistry of the living organism, this is not to assert that the forms of energy in living matter are identical with the forms of energy exhibited in non-living structures. And, undoubtedly, there are important phenomena, especially in connection with the nervous system, which lie outside the sphere of experimental inquiry, and belong to pure psychology.

The mystery of life is, probably, an insoluble problem in its ultimate reduction, and, for my own part, I am quite willing to accept Du Bois Raymond's celebrated dictum—*Ignoramus et ignorabimus*.

The fluid nature of living substance is its most important physical property. Hence, the deep significance of the study of colloids, of osmotic phenomena, ionic dissociation, and the varying and complex functions of membranes and of surfaces of separation between the cells of the plant or animal.

From a purely physical point of view, living substances may almost be regarded as animated water (H. E. Armstrong). Or, we may say with Loeb, that all life phenomena are ultimately due to motions or changes occurring in colloidal substances, for Nature works with simple tools.

Another illustration of physico-chemical processes is afforded by catalytic, or ferment, phenomena, which play a dominant part in our physiology, and it is no exaggeration to say that the wheels of life are lubricated by the oil of catalysis. In Dr. Bayliss's recent monograph on "The Nature of Enzyme Action," we have an excellent and lucid exposition of the fundamental problems connected with enzyme action.

In the highest sphere of inquiry—viz., that of mental processes—medical men are not much attracted by the barren speculations of scholastic psychology. Long

ago that monumental genius, Johannes Müller, tersely expressed this feeling in the phrase—*Psychologus nemo nisi physiologus*.

The strange and weird phenomena of mental disease, of hypnotism, suggestion, heredity, instinct, and so forth, will, I am convinced, never be elucidated except by the labours of physiological psychologists, who do not shut themselves up in their studies to dream dreams, but avail themselves, as opportunity offers, of the aids which comparative anatomy and physiology, coupled with experimental science, alone can afford. In this connection I may refer to the excellent textbook of "Experimental Psychology," by Mr. Charles S. Myers (1909).

Human happiness and well-being have been and will be further advanced by physiologists, and for the furtherance of this laudable end it has been proved up to the hilt that it is absolutely necessary to utilise experiments on animals, humanely conducted—a method too often stigmatised by the injurious and inapt term, vivisection.

Sir Samuel Wilks tells a story of an old lady he heard declaiming against the horrors of vivisection. She went on to say that there was no cruelty or dreadful thing that scientific men would not do to find out how things acted. There was nothing that God had created but what they would destroy to look at its inside; but, "thank God," she ended, "they can't touch the beautiful aurora borealis!" (*Brit. Med. Journ.*, July 31st, 1909).

Already a beginning has been made to create a mechanics of the brain and higher nerve centres, and its future is rich in promise.

For example, let us take the law of mass action, which postulates that the course of a chemical reaction depends not only upon the mode of the chemical affinities, but also on the relative quantities of the interacting bodies. Suppose we stimulate a muscle so that its metabolism is continuously increased—i.e., the dissimilation stage of its metabolism is excited—then, automatically occurs a new formation of living substance—i.e., a secondary excitation of the assimilation phase of its metabolism is produced. Thus the deficit is equilibrated, the metabolic equilibrium is restored, the bionous once more = 1. The converse will, of course, happen if the assimilation process is augmented by an increased supply of nutriment.

Thanks to this principle we are able to repair the inroads of fatigue, to overcome disease, and to prolong life (Verworn, *loc. cit.*, p. 595).

Once more, the principle of interference of stimuli is one of far-reaching importance in nerve-physiology and nerve therapeutics, and the phenomena of inhibition can, perhaps, be best interpreted in terms of interference. A familiar example of inhibitory influence is afforded by the facts of snake-charmers, as practised in Egypt and the East from the time of Moses and Aaron until now.

Again, what a vast and fruitful field of inquiry and of practical therapeutics is opened up by investigations upon the effects of auto-intoxications, intestinal and otherwise, upon mental functions.

Have we not gained light and won therapeutic triumphs by a study of the effects on the nervous system of alterations in the internal secretory glands, of the thyroid and para-thyroid, of the adrenals, and of the sexual glands.

But inexorable time presses, and I must not tax your patience with more than one other thought.

By far the most striking illustration of the influence of external conditions upon vital processes is afforded by the different forms of radiant energy, considered as stimuli.

Until recently we were acquainted only with the action of luminous and thermal rays as physiological stimuli, and we have reviewed one or two points in connection with heat rays.

Time forbids to enter upon the fascinating topic of the potent influence of light-rays, considered apart from heat-rays, and it is unnecessary to dwell upon the services rendered by the Finsen light.

Speaking generally, it may be stated that the physiological activity of light-rays is inversely proportional to their wave-length. Hertel has lately made special and suggestive investigations upon this subject. He

arrives at the conclusion that in all probability the general action of light-rays upon living substance depends, in the first instance, upon modifications in the oxygen-exchange.

Fourteen years ago (1895) a new world was disclosed to our ken by the discovery of Röntgen rays, and this was quickly, and logically, followed by the revelation of Becquerel rays, and of the radio-active bodies—viz., uranium, radium, thorium, etc.

Experimental facts have forced us to widen our conception of a "ray." We have now to recognise two kinds of rays—

(1) Streams of particles, of different mass, and with velocities ranging from 15,000 miles per second up to nearly that of the speed of light—i.e.,  $\alpha$  and  $\beta$  rays from radium.

(2) Electro-magnetic vibrations of the ether.

No conclusions of any weight can yet be drawn as to the general physiological action of Röntgen rays, and I pass over the now familiar applications of them to diagnosis and treatment in medicine and surgery.

Among radio-active bodies, especially radium, the  $\alpha$ -rays appear to be the most potent, both chemically and physiologically. From a therapeutical standpoint they can scarcely yet be taken into account, for they are held back by slight obstacles, even by the thinnest mica, glass, or aluminium covering of the tube or vessel which contains the radium salt. The  $\alpha$  particles are completely stopped by a sheet of note-paper, whilst the  $\gamma$  rays from radium can be easily detected after traversing 20 centimetres of lead (Rutherford).

It is, perhaps, possible that we may learn to harness  $\alpha$ -rays to our service by employing either polonium, which yields only  $\alpha$ -rays, or we may perhaps utilise the positive, so-called, "canal rays" of a Röntgen tube.

A position of unquestionable utility has been gained by the employment of the more penetrating  $\beta$  and  $\gamma$  rays, which hang together, and the prospects of radio-therapy are undoubtedly bright. The relative penetrative powers of the  $\alpha$ ,  $\beta$ , and  $\gamma$  rays may be approximately represented by 1 : 100 : 10,000.

It is probably true that radium can effect a cure in certain cases where X-rays fail, but it is premature to generalise.

Everyone here has, doubtless, read some of the already huge literature of the subject, and will recall Sir F. Treves' lecture on "Radium" (*Brit. Med. Journ.*, Feb. 6th, 1909), and the excellent address lately delivered by Dr. Wickham, of Paris, before the British Medical Association in Belfast.

Wickham's pioneer researches were carried out in the Radium Institute in Paris, of which he is director. Thanks to the enlightened foresight of the King, and the generous aid of Lord Iveagh and Sir E. Cassel, we shall shortly have a Radium Institute at home, which will, we feel assured, make weighty contributions to the new science, and add invaluable weapons to our therapeutical arsenal.

## OPERATING THEATRES.

### GUY'S HOSPITAL.

CHRONIC APPENDICITIS WITH ABSCESS OPENING INTO THE CÆCUM.—MR. ROWLANDS operated on a man, æt. 60, who gave a history of a sudden attack of pain in the right iliac fossa eighteen months ago, followed by a high temperature, but no swelling, and lasting for three or four days. He was in bed a fortnight. The bowels were constipated, but were relieved by enemata. He had never been quite well since, having twinges of pain in the abdomen, somewhat worse in the right iliac fossa, but he went on with his work. About a year later, a somewhat similar but less severe attack developed, and three weeks ago he had a third attack. The temperature was raised for four days, but no swelling was felt. This attack, associated with constipation, was followed by diarrhoea and a great deal of colicky pain. Mucus was said to have been passed per rectum on several occasions, but no blood. The patient wasted about one stone in the last six months. On admission, there was nothing abnormal per rectum; the pulse and temperature were normal,

and there was no leucocytosis. A vague swelling was felt rather far in the lower right quarter of the abdomen above the right side of the pelvic brim. This swelling varied in size and shape from time to time, and various alternatives were suggested in the diagnosis:—(1) The history suggested appendicitis with suppuration, which had never entirely cleared up. (2) Considering the man's age, and the fact that he had never been well for eighteen months, and had wasted considerably, a carcinomatous growth about the cæcum seemed possible; the amount of colicky pains, with the visible peristalsis, seemed to support this; moreover, it was not uncommon for attacks of peristalsis to complicate a growth of the cæcum. (3) The variability of size and shape of the swelling, and the colicky pains, suggested chronic intussusception, but the absence of blood was dead against this.

In any case, it was decided to explore. This was done, and an appendicular abscess was discovered the size of a walnut, lying postero-internally to the lower end of the cæcum behind the lower end of the ileum at the root of the appendix, the terminal two-thirds of the appendix lying free in the peritoneal cavity below and internal to the abscess. After the peritoneal cavity had been packed well away, the abscess was opened. It contained muco-pus; its walls were very thick. The appendix was removed, and the stump crushed and inverted in the usual way. It was then discovered that there was an opening from the abscess into the back and inner side of the cæcum near the ileum; this was inverted by means of a purse-string suture. The abscess cavity was thoroughly cleaned and as much of the wall removed as possible. The abdomen was closed except for a small drain leading down as far as the parietal peritoneum only. This was removed in two days, and the patient is doing perfectly well.

## TRANSACTIONS OF SOCIETIES.

### ROYAL SOCIETY OF MEDICINE.

#### OBSTETRICAL AND GYNÆCOLOGICAL SECTION.

MEETING HELD THURSDAY, NOVEMBER 11TH, 1909.

The President, Dr. MACNAUGHTON-JONES, in the Chair.

Dr. A. E. GILES showed a specimen of ovarian adeno-carcinoma weighing 18 lbs., removed from a widow, æt. 60. Also, a case of kraurosis of the vulva of an advanced type, in which a small nodule of carcinomatous growth was just beginning.

Dr. T. G. STEVENS showed a specimen of adenomyoma of the vaginal wall, consisting of two tumours, one situated on the anterior, and the other on the posterior vaginal wall. Both contained cystic spaces lined by columnar epithelium, and he thought from their position and structure that they must be derived from displaced Wolffian tubules.

Also a specimen of fibromyoma and pregnancy with extensive thrombosis of all the veins of the capsule and necrobiosis of many areas of the tumour.

Dr. H. J. PATERSON read a short communication on a CASE OF RUPTURE OF THE UTERUS TREATED BY SUTURE OF THE RENT PER VAGINAM AND DRAINAGE.

The patient, a iii.-para, after premature rupture of the membranes was found to have a prolapsed pulseless cord. Delivery was effected by traction on the foot without difficulty, but on introducing the hand into the vagina after delivery it passed into the abdominal cavity. On admission to the Temperance Hospital, the patient was profoundly collapsed. The vagina was full of blood clot, and a coil of intestine was felt protruding through a large rent in the vaginal vault, through which the fist could be easily passed into the peritoneal cavity. The left parametrium was involved in the tear, and there was free bleeding from two large vessels. These were secured by ligature. Further examination showed that the cervix and lower uterine segment were torn through for four inches, but as the uterus appeared firmly retracted, no attempt was made to define accurately the upper

limit of the tear. The torn edges of the cervix and lower part of the uterus were approximated by three catgut sutures. A large rubber drainage tube was passed into Douglas' pouch and the torn edges of the peritoneum and the vaginal wall were drawn together round it by a purse-string suture. The patient was much collapsed at the end of the operation, but continuous saline proctolysis was maintained for 60 hours, and she ultimately made a good recovery. Dr. Paterson said, as far as he was concerned, the method of vaginal suture and drainage had not been adopted in any of the recorded cases of rupture of the uterus. He thought that some writers laid too much stress on the difficulty of controlling hæmorrhage and Nature's ability to deal with internal hæmorrhage. Suture when possible was to be preferred to hysterectomy, and the cases recorded seemed to show that some of them had recovered in spite of hysterectomy, rather than on account of it.

Drs. COMYNS BERKELEY and VICTOR BONNEY read a paper on

#### LEUKOPLAKIC VULVITIS AND ITS RELATION TO KRAURO-SIS VULVÆ AND CARCINOMA VULVÆ.

The authors pointed out that leukoplakia and kraurosis were two distinct diseases, which could be identified quite easily, both from clinical observation and a pathological examination of the tissues affected. The authors based their paper on the series of 24 cases which they had operated upon and 75 which had occurred in the practice of their colleagues at the Middlesex Hospital and Chelsea Hospital for Women. The authors pointed out that leukoplakia can be differentiated clinically from kraurosis:—

1. By its appearance, which is quite different from that of kraurosis.

2. By its distribution, in that it never affects the vestibule, orifice of the urethra, or vagina, whereas in kraurosis these areas are always affected; and whilst in the latter disease the outer surface of the labia majora and the skin of the thighs and the perineum in their neighbourhood are never affected, in the former disease it is often involved.

3. By the symptoms, for whereas the striking and often the only symptom of leukoplakia is pruritus, this symptom is absent in kraurosis, whilst dysuria and dyspareunia is most marked.

4. By its relation to carcinoma. Leukoplakia is often followed by carcinoma of the vulva, and in every case of this disease which the authors had seen leukoplakia had been present, whilst kraurosis had no relation to carcinoma.

5. By its histological findings. It will be seen that in leukoplakia vulvitis there occurs a diffuse thickening of the epithelial elements with a marked tendency to downgrowth, as exhibited by long inter-papillar processes. The underlying connective tissue is at first the seat of a lymphocytic aggregation, which leads on to a diffuse fibrosis with a total disappearance of yellow elastic fibres in the zone immediately underlying the epithelium. In kraurosis the epithelium is abnormally thin, especially over the red patches seen in that disease. Polymorpho-nuclear leucocytes and massive aggregations of plasma cells are seen, whilst lymphocytes are comparatively sparsely represented. The connective tissue becomes the seat of an atrophic shrinkage, but except at the points of massive plasma cell proliferation, no disappearance of the yellow elastic tissue occurs.

The authors lastly discussed the relationship of leukoplakia to carcinoma, including multiple carcinoma of the vulva, recurrences of the growth, and glandular metastases.

With regard to treatment the authors were strongly of the opinion that all the cases of leukoplakia vulvitis should be treated by excision, because this disease in their experience had been so commonly followed by carcinoma.

The paper was illustrated by a series of micro-photographs demonstrated by the epidiascope.

Dr. A. E. GILES said that there was no evidence in any case of kraurosis which had come under his notice of a history of either syphilis or tubercle, but he regarded the condition as an atrophic one incidental to

the general atrophy affecting the pelvic organs at the menopause.

Dr. AMAND ROUTH agreed that the authors had brought forward very strong arguments in favour of their contention that leukoplakia and kraurosis vulvæ were essentially distinct conditions, capable of easy clinical differentiation. If their contention were correct all modern text-books were wrong, for without exception they described the two conditions under one name—kraurosis vulvæ.

According to the authors, in leukoplakia, pruritus was the main, often the only, symptom, neither the vestibule nor the urethral orifice were ever attacked, but the disease tended to spread over the inner thighs, perinæum and anus, and there was no tendency to contraction of the vaginal orifice. Epithelioma of the vulva very often followed this condition. In kraurosis vulvæ, on the other hand, there was no pruritus, and dyspareunia was the main symptom. The vestibule and urethral orifice were always attacked, the thighs, perinæum and anal region never. The vaginal orifice always became contracted, and carcinoma never developed on the vulva in kraurosis.

He described a case, however, to prove that if leukoplakia and kraurosis were not two stages of the same disease, they sometimes co-existed.

As regards treatment, he had found that the continued application of equal parts of unguentum hydrargyri and unguentum zinci or unguentum plumbi acetatis almost always relieved the pruritus and made the tissues softer and pinker, but the condition was apt to recur. He had not seen any case with a definite history of syphilis.

Dr. W. EDEN said that there was nothing inherently improbable in the idea that leukoplakia was a condition antecedent to epithelioma, for this sequence had been recognised for long in the tongue. He could hardly follow the authors in their recommendation to excise all patches of leukoplakia, since this condition was not at all uncommon, while the malignant transformation described in the paper was comparatively rare.

The President, Dr. H. MACNAUGHTON-JONES, said that the last edition of his text-book was open to the criticism of Dr. Routh, for although the views of many authorities were epitomised, there was no mention of leukoplakia. The two conditions were dealt with under the one term, kraurosis. His experience led him to regard discharge—both uterine and vaginal, and senility, as important factors in the ætiology. No patient he had treated had he known to suffer from carcinoma subsequently. He believed in free excision of the "wash leather" areas, though not to the exclusion of other therapeutic measures such as the application of pure carbolic acid and the use of a 5 per cent. solution of nitrate of silver. He also recommended adrenalin, the use of lanolated ichthyol ointment, and yellow oxide of mercury, with emollient baths, followed by the application of the nitrate of silver. He quoted two cases cured by excision and transplantation of sound skin, combined with the use of the remedies mentioned. He believed that while nothing save excision would suffice in certain cases, yet in others cure could be effected without resource to this severe measure.

Dr. COMYNS BERKELEY, in reply, said that the discussion of his paper had mainly had reference to two points—namely, the ease or otherwise of the diagnosis of these two conditions and the question of the treatment of leukoplakic vulvitis by excision. In reality the two diseases were easy to diagnose, and it was their marked difference which had drawn his and Dr. Victor Bonney's attention to this subject. With regard to treatment, they were convinced that the proper treatment was to excise the diseased areas. He had had the unusual experience of operating upon 18 cases of carcinoma of the vulva all associated with leukoplakia, and at least three of these had been subjected to prolonged treatment for the leukoplakia. He saw no reason why leukoplakia and kraurosis should not occur in the same patient.

MR. GEORGE COATS has been appointed assistant surgeon to the Royal London Ophthalmic Hospital (Moorfields Eye Hospital).

## ROYAL ACADEMY OF MEDICINE IN IRELAND.

### SECTION OF MEDICINE.

MEETING HELD FRIDAY, OCTOBER 29TH, 1909.

The President, WALTER G. SMITH, M.D., in the Chair.

#### ON SOME RELATIONS OF PHYSIC TO PHYSICS, AND THEIR BEARING UPON THERAPEUTICS.

THE PRESIDENT, after some introductory remarks, referred to the decay of homœopathy, and to the rise of "Christian Science," that audacious fraud and moral influenza, the Christianity of which is as *bizarre* as its science is contemptible. Attention was then drawn to the parallel courses of modern physiology and modern chemistry in returning to the closer study of their respective units—viz., the cell and the atom. The general physico-chemical conditions of the human body were briefly discussed, and in regard to the problem of the mystery of life, the President accepted Du Bois Reymond's dictum—*Ignoramus et ignorabimus*. In regard to the highest sphere of inquiry—viz., that of mental processes—it was pointed out that Johannes Müller hit the mark when he said—*Psychologus nemo nisi physiologus*.

In conclusion, the subject of radio-therapeutics was briefly touched upon, and gratification expressed at the foundation of a British Radium Institute.

This paper will be found in *extenso* on page 551.

### SECTION OF OBSTETRICS.

MEETING HELD FRIDAY, NOVEMBER 5TH, 1909.

The President, H. JELLETT, M.D., in the Chair.

#### EXHIBITS.

DR. E. HASTINGS TWEEDY exhibited a specimen of multiple myoma of the uterus. In such cases one would, if possible, perform a myomectomy. But in the case before them it would have been very difficult, as the uterus was absolutely riddled with tumours. It appeared as a smooth myomatous uterus, but on splitting it they could hardly see any muscular structure, and each of the two or three hundred myomas was absolutely distinct, some degenerating, some not. The patient had a temperature, and microscopic specimens had the appearance of malignancy, but Dr. Rowlette told him he could find no malignant disease.

Dr. TWEEDY exhibited a specimen of an ordinary Wertheim's operation in a girl about 24 years of age. There was very considerable ulcerative cancer spreading into the broad ligament. The operation went well until he began to remove the cervical part of the uterus. The cancer then broke away, and he got the end of the vagina. He was able to shut off the intestines, and the woman did not become infected. What was particularly interesting was that he traced up the ureter, and found that while the cancer spread above and below the ureter, it was not diseased. The ureter was so intimately associated with the cervix that in dealing with it one had to hug the cervix to avoid the ureter. He pushed down the bladder far into the vagina, and got his finger between the vagina and bladder. He worked the bladder laterally, and was able to dig the ureter completely out of the cancer, and took away the microscopic evidence of the disease. That was three weeks ago. The patient had gone on very well until a week ago, when her temperature ran up, and a foetid discharge arose. Though she could now hold a certain amount of urine in the bladder, still a quantity passed away, and he had no doubt he was now dealing with a ureteral fistula. In the majority of cases such fistulæ healed spontaneously, but from the accounts which he had read on the subject he found that the ureter practically never became patent again. The urinary discharge would dry up. The ureter cicatrised, and the kidney ceased to secrete. They would only get a hydronephrosis so long as there was some fluid passing through the ureter. If they did not allow a drop to escape through the ureter, the kidney would not secrete urine, and his hope was that

the cicatricial matter would absolutely occlude the ureter, and the kidney would become inert.

Sir WILLIAM SMYLY said ureteral fistula was a risk that anyone was liable to who undertook Wertheim's operation. Recently, when assisting in a case where the ureter had been cut accidentally and where implantation into the bladder was impossible, he had persuaded the operator to ligature it with silk and fix it in the abdominal wound. In that case it was found necessary afterwards to extirpate the kidney.

The PRESIDENT of the Academy said he had once transplanted the ureter into the bladder, and, as far as he knew, no leakage occurred, and no obvious kidney tumour developed. He would be interested to see the result in Dr. Tweedy's case, as it was difficult to understand why hydronephrosis should not occur when the ureter was completely blocked when it occurred where the obstruction was only partial.

The SECRETARY recalled a case of Sir Arthur Macan's in which the urine continued to be secreted as freely as ever from the kidney belonging to the detached ureter, and showed no sign of cicatrization of the cut end of the ureter, or blocking off of the kidney.

The PRESIDENT said one could understand that there was a kind of race between the function of the kidney and the destruction of the substance by back pressure, and would be inclined to think that hydronephrosis would result before the destruction of the kidney substance.

Dr. TWEEDY, in replying, said that he had in his remarks exactly summed up the conclusions of the experiments that he had read, the last being from the Johns Hopkins Hospital within the last six months. The ureter was simply cicatrised over, there was no patency, and the kidney ceased to secrete. Sir William Smyly's case was not on all fours with the condition of spontaneous healing. It was almost impossible to get the ureter to unite permanently by tying.

Dr. PUREFOY exhibited a specimen of pyosalpinx, which had reached a very considerable size in a short time, and had arisen under circumstances which made its origin difficult to account for. The patient had been married several years, and was childless. She had lived abroad, and had had malarial fever and other illnesses incident to residence in a tropical climate. She came under his care for a trifling catarrh of the uterus, and became, as he believed, cured. She went to the country for a few weeks, where she was attacked with what she thought to be malarial fever, with severe abdominal pains and tenderness. On her return to town it was quite easy on palpation to find a tumour having its origin from some of the pelvic organs. He waited for six weeks before operating. On opening the abdomen a rounded tumour came into view completely concealing the uterus, to which it was extensively adherent. In separating it, to his great distress, the sac ruptured, and a quantity of pus escaped. He was, however, happy to add that the patient had an uninterrupted recovery. There was no ground for thinking the condition to be due to any gonorrhoeal affection. There was no evidence of tubercular disease, still he took it that it originated in tubercular salpingitis. She had no signs of tuberculosis, but her family history was unfavourable.

Dr. TWEEDY said it seemed to him worthless to leave a uterus that could be of no use when the tubes were gone. When a tube burst, and pus flowed into the pelvis, it was largely a matter of chance if the patient would recover. If the pus was septic, he knew of no way to avoid the giving of sepsis. If there was any doubt as to the nature of the pus, it would, he thought, be safer to cut away the uterus and the tube at the other side: this would have provided a large hole for free drainage. That hole and the vagina should be packed with a large quantity of iodoform gauze, and the gauze spread out right over the pelvis where the pus had flowed, and where the intestines would come the moment the patient was moved out of position.

Sir W. SMYLY said he had taken out one tube, and the woman had become pregnant afterwards. He did not think it good practice in every case to remove both tubes and uterus, but where there was soiling of the

pelvis, and where both tubes had to be removed, he considered it good practice to remove the uterus also.

Dr. HORNE said he had recently adopted the practice recommended by Dr. Tweedy in a similar case; the patient did very well up to the fifth day, when she complained of pain in the region of the heart, and rapidly sank in a few hours. He wished to ask Dr. Purefoy what treatment he adopted when the pus escaped into the abdominal cavity?

The PRESIDENT thought it difficult to say positively that the case was tuberculous, and he suggested that it originated as one of extra-uterine pregnancy, and that a hæmatoma formed in it and suppurated. He was afraid he was in a minority in thinking it good practice to leave the uterus even if both tubes were removed. If any portion of the ovaries was left behind, menstruation would continue, which was an important matter from the point of view of the mental comfort of the patient.

Dr. PUREFOY, in reply, said it was possible to lift the tumour out of the abdomen to some extent. He had packed the surrounding area with sponges, and the patient escaped contamination from the fact that the adjacent structures had been protected, and the point of exit was outside the incision, and somewhat out of the scene of operations. His recollection was that there was no palpable disease of the other tube, and the case was so serious that he was glad to avoid any unnecessary removal of other parts, and to conclude the operation so far as was compatible with the safety of the patient.

The PRESIDENT gave an address on  
THE TEACHING OF PRACTICAL MIDWIFERY IN THE PAST  
AND AT THE PRESENT TIME,

which will be found in full on page 540.

The PRESIDENT of the Academy said the questions raised were of extreme importance. As a member of the General Medical Council he had a good deal to say to the whole question, and the chief difficulty experienced by the Council was that of proper hospital teaching. In Dublin they were singularly fortunate in that respect, but some of the provincial towns—and even London—were not so fortunately situated, and the principal opposition to the recommendations had come from the licensing bodies, who did not see their way to get such education for their students. Some persons thought the recommendations should have gone further than they did; but some of them, it could not be doubted, would lead to better education. Those of the Council who were not gynæcologists and obstetricians were very strong on the point that students should be clinical clerks and surgical dressers before taking up practical midwifery, so that they might obtain a reasonable amount of teaching in the practice of antiseptics. The General Medical Council could only make suggestions; but their experience was that while some of the recommendations were kicked against at first, they were usually carried out. It had never been necessary for the Council to exercise its power to report the non-adoption of recommendations to the Privy Council, an action which might lead to the degrees of the particular body not being registered. He believed that the recommendations would in time be carried out and strengthened, but they had to move slowly.

Dr. KIDD said he agreed with the President of the Section that a period of six months was one which allowed the student to obtain the necessary knowledge with greater ease than if it was reduced to three months. He thought an alternative might be made with regard to the period spent as an intern in attending a lying-in hospital. A man living inside the walls of a maternity institution saw everything that was going on, he lived in an obstetric atmosphere. If attending as an extern student two nights in the week, whether he saw a case or not, it was difficult for him to devote his attention to lectures next morning. He thought too little attention was paid to the taking of ample notes of cases either in the house or extern, and it should be the duty of assistant masters or clinical clerks to see that notes were taken and signed by the officer of the institution before credit was allowed for the case. When the question of the

clinical examination had first come under his observation, he had hesitated as to the feasibility of its being made practical or practicable; but experience had shown him that the difficulties which he had conjured up were to a great extent imaginary. A practical test was quite feasible as regards palpation, and the general conditions in the puerperium, and questions could be asked to supplement the history that the student gave. He was disappointed in the notetaking.

Dr. TWEEDY thought it was a hardship on the student to cut down the course of instruction to three months. But there was one safeguard in the rules that had lately come into force, which had put the new rule ahead of any of the older forms—the rule that a student had to attend thirty-two times within three months. That rule made it impossible for a maternity hospital to give a three months' course on a one month's residence.

Dr. GIBSON thought the period, instead of being reduced, should be raised to twelve months. But if a man lived in a hospital for one or two months, he would learn far more than from attending twice a week for half a year, and should be spared further attendance.

The SECRETARY agreed with Dr. Gibson. Even in six months, of two nights a week, he did not think one would see a quarter of the number of cases which one would see if resident day and night.

The PRESIDENT of the Academy rose to accentuate what Professor Kidd had said about notetaking. The same thing applied to all other branches of the profession, and the result was that, while their students could hold their own as far as practical subjects were concerned, in competition for the Services, they were very much behind English and Scottish students in the reports of a clinical case, and the commentary on a hypothetical case which formed part of the Army Medical Examination.

The PRESIDENT, in reply, said he recognised the difficulties that existed, and the necessity for advancing with caution and care. They might all agree that the caution and care had been very well marked in the past, and trust that advance in the future would be characterised by more boldness. It seemed to him that for the qualified man there was no question that one month inside was better than three outside, but he doubted whether the average student could assimilate what he saw, as he could if it was spread over a long interval. He was therefore more inclined to agree that the time should be extended to a year. Everyone recognised the practical examination as a great step forward, and the marking should in an entirely new departure, be lenient at first.

#### GLASGOW EASTERN MEDICAL SOCIETY.

MEETING HELD WEDNESDAY, NOVEMBER 3RD, 1909.

The President, Dr. PETER BUCHANAN, in the Chair.

Dr. HENRY RUTHERFURD gave an interesting demonstration on a number of surgical cases in the Royal Infirmary, Glasgow. Dr. Rutherford demonstrated the value of plaster of Paris splints in fractures between the knee and ankle. The ordinary splints to which we had been accustomed in our student days for these fractures were either a posterior splint, Clive's splint, or a half-box splint, but the great drawbacks to these were that there were almost always one of the following conditions developed—pressure, œdema, or stiffness afterwards. Dr. Rutherford in these cases almost invariably uses a "home-made" plaster of Paris splint, and also the same splint for tubercular conditions of the knee. The splint is made to cover only the middle of the foot, and allows free movement at the metatarsal joint. Within 48 hours the splint is cut longitudinally, and at the back, by being of less thickness, it acts as a hinge, and can be replaced at will. The advantage of this method is that you do not interfere with the nutrition of the limb, and give free movement to the metatarsal joint, which is a very valuable addition to the patient when the time comes for him to make any

attempt at voluntary progression, and there is practically no œdema at any time.

Dr. RUTHERFURD also showed a case of intra-cranial pressure in the lateral ventricles. The following symptoms were present: slow pulse, slow respiration, no temperature, slight pain in the head, only occasional sickness, well-marked double optic neuritis, slight facial paralysis, slight weakness of right hand, general stupor, complete absence of irritative symptoms, fœces and urine were passed involuntarily. The decompressive operation was performed, and some 6 to 8 dr. of a yellow spinal fluid were obtained after opening the dura mater. The operation was performed three weeks ago, and the patient is now practically recovered, although a little weakness of the right hand is still present. Specific disease as the cause of this pressure was eliminated by the usual methods.

Dr. RUTHERFURD showed a case of carcinoma recti, where he had operated by simple colotomy, and two cases of goitre, one in a young female, which encircled the neck very much like a collar. The various dangers of operations on these were discussed. Interesting cases of varicose veins were shown, and Dr. Rutherford seems to prefer the operation done by means of Billroth's probe, especially where the veins are superficial, and by this means the skin, particularly in the region of the knee, is left intact, and is a great advance in treatment, especially in those cases where the patient is going to lead an active life in the saddle (public services).

Dr. RUTHERFURD also showed interesting post-mortem specimens of gangrenous hernia, and last, but by no means the least interesting, was a case of extra-uterine gestation, where the patient had had both ovaries removed some months before for cystoma, and afterwards had again become pregnant. From this specimen it appears that a little of one ovary had been left *in situ*, it had also become cystic, and had been the cause of the conception.

## CORRESPONDENCE.

### FROM OUR SPECIAL CORRESPONDENTS ABROAD.

#### FRANCE.

Paris, Nov. 21st, 1909.

#### THREE LITTLE CLINICAL SIGNS.

THREE little clinical signs, produced by pressing rapidly the finger-nail over the skin, or some blunt instrument, in certain nervous affections—red streak, white streak, and local cutis anserina, are frequently of some importance, says Dr. Maurice, as they may materially aid diagnosis in obscure diseases.

The red mark is a streak of the erythematous type, and is more or less intense and durable according to the case.

Its value in confirmed meningitis is well-known, but in a general point of view, as M. Hutinel remarked, it can be found in dyspeptic infants and in children suffering from measles or scarlatina, accompanied with lymphocytosis in the cephalo-rachidian liquid, which could not be traced to hereditary syphilis nor to meningitis, but to a meningeal reaction. In nervous affections erythema in the form of patches is of current observation.

Eppinger and Hess class dermatographism among the signs of irritation of the vagus nerve. In any case, as Hutinel observed, there exists an intimate correlation between erythema and meningeal irritation; consequently the production of a red tracing, either spontaneous (erythematous patches) or provoked (red mark of meningitis), possesses particular clinical value.

The red streak is not, however, an exclusive sign of meningitis, for it indicates also a simple cerebral irritation or an irritation of the pneumogastric nerve, and classes the patients among those who suffer more or less from nervous disturbance.

The white streak was described a few years ago by Sergeant as indicating disease of the supra-renal capsules. According to the author, where, in the course of an infectious malady, with nervous depression,



hypothermia, arterial hypotension, succeeding fever and hypertension, the white streak can be provoked, one is justified in suspecting that the renal capsules are touched, and this fact is of great importance.

The opinion of Sergent has been adopted by Hutinel in the diagnosis of scarlatina, by Martin and Darré in diphtheria, where cardio-vascular asthenia is frequent.

The sign of cutis anserina was first remarked by Vergely in two patients suffering from angiocholitis. It consists in a slight retraction of the skin provoked by a blunt instrument passed rapidly and without violence over the region (hepatic), and lasting about a minute. Vergely concluded that the sign indicated infection, with perhaps suppuration behind the liver.

Although the sign may really exist, it is not special to hepatic affections (as it has been noticed in neuro-pathic patients who presented no trace of hepatic disorder). As a local symptom, it indicates an intense irritation of the sympathetic system, and coincides generally with a tendency to dilatation of the pupil, acceleration of the pulse, paresis of the digestive tract, mental depression and glycosuria. The red mark is accompanied in general with inverse phenomena.

Thus the local sign of cutis anserina is governed by the sympathetic system. In such persons the alimentary régime should be tonic and substantial, and the medical treatment chiefly psychotherapeutic. It is among this class that neurasthenia is prevalent.

The red streak, on the contrary, indicates a certain state of meningitis, and should cause the attendant to prescribe a non-toxic régime, sedatives in the form of warm baths, bromides, belladonna, and, where feasible, change of scene.

Such patients require looking after, as it is among them that melancholia, imaginary persecution, impulsiveness, are to be found.

### GERMANY.

Berlin, Nov. 21st, 1909.

At the Medizinische Gesellschaft, Hr. Blumberg spoke on the

#### SIGNIFICANCE OF CERTAIN PRESSURE AND "RELEASE" PAINS IN REGARD TO PROGNOSIS AND INDICATION FOR OPERATION IN APPENDICITIS AND PERITONITIS.

He spoke of the difficulty met with even by the most experienced in determining early in these affections the prognosis and necessity for operation. He passed the individual symptoms in review, and showed how some were unreliable, how in some cases they had to estimate as a whole, and how in many cases they did not suffice to afford any decided conclusion. Special weight had been laid by all those familiar with the disease on the symptom of pain, and especially pressure pain. From observations made in the course of a number of cases, part of which were operated on and part not, he met with another pain phenomenon, which he first described in 1907 in the *Münch. Med. Wochens.*, No. 24, and which permits the important moment to be recognised in which the inflammation passes to the peritoneum. The existence of such a symptom has been confirmed on many sides, first of all by Ewald, who described it as a "prägnantes" and "markantes" phenomenon.

The inquiry into it is made in this way: The physician presses on the part of the abdomen affected, and whilst the hand is still there, asks the question if it causes pain. After receiving the answer, the palpating hand is suddenly lifted off, when at the moment of lifting a pain is experienced, and the second question is asked whether the pain on pressure or the pain on releasing it is the greater. When the symptom is well marked, the expression of pain may be recognised in the patient's face.

In this way two pains are tested, and a comparison made between the degrees of the two. The test may also be made in another way: You make the pressure test, and then raise the hand slowly; after this you again make the same test, but this time take your hand off suddenly, and then make the inquiry as to whether there was pain from both of the tests, and in which of them it was greater. In making this trial it must be borne in mind that the degree of pressure must be identical in both parts of it. As showing the value of the symptom, the speaker related cases that he had

operated on in which by the use of this symptom it had been possible to determine the severity of the case (for example, gangrene of the vermiform appendix, whilst the other symptoms either failed altogether or were not decisive).

The pain from sudden release of pressure is due to jarring of the peritoneum from the abdominal walls regaining their position rapidly; it is therefore a sign of peritonitis, and consequently also in disease of the female "adnexa," a sign that the peritoneum has become implicated. In recent disease, or in a renewed attack of an old one, the pain on taking off the pressure suddenly is very violent, and distinctly greater than that caused by the pressure itself. As the inflammation subsides both pains are nearly alike; later on the "release" pain becomes less than the pressure pain, at last disappearing, the pressure pain still remaining for a longer or shorter period.

The phenomenon is an early symptom of peritonitis. Kocher ascertained its presence in one case in which an operation was performed within four hours of the commencement of the illness.

The appearance of the sign in a marked manner in appendicitis is a warning signal that specially points to danger when it shows itself suddenly, soon after the commencement of the attack.

Hr. Th. Landau said that he had often had the opportunity of observing the symptom. This method of examination had the advantage that strong and dangerous pressure over the abdomen was avoided. It was not a specific sign, however; it occurred in diseases of women—pyosalpinx, for example—even when the vermiform appendix when brought into view at an operation proved to be quite sound. It was absent also in latent and chronic appendicitis.

Hr. Fulda remarked that two years ago a Roumanian colleague had told him that the symptom was one that was well-known in France, and made frequent use of there. Was Blumberg acquainted with the literature of the subject?

Hr. Blumberg, in reply, said that he had said himself that the symptom was not specific for appendicitis, but that it was of high value in suspicious cases and in the absence of other symptoms, and in the matter of prognosis. In spite of a thorough search into the literature of the subject, which, in connection with the question of appendicitis was beyond all bounds, he had not succeeded in finding any mention of the symptom described before his own publication on the subject.

### AUSTRIA.

Vienna, Nov. 21st, 1909.

#### SPOROTRICHOSIS BOERMANNII.

At the Gesellschaft der Aerzte, Krenn showed a patient suffering from this disease, which was first described in 1903, as prior to that date no case of the kind had been recorded in Austria. The irritant is the sporotrichon Boermannii, which is a finely segmented thread effect in the skin. Two forms appear to be recognised, viz., the syphiloid form, which resembles tubercles, but finally forms pus; the other is called the tubercular form, having a resemblance to lupus with fine granules. The disease is usually not associated with fever, even the most acute cases with all the phenomena of septic pyæmia. Potassium iodide seems to be beneficial where the disease has located itself in the periosteum or bony structures.

In conjunction with this case, Volk showed a few preparations of the sporotrichon, as well as gave a history of a few experiments he has performed with the parasite. The infection was obtained from an original culture from Ravant, and applied to different animals. It is found that dogs, cats, and rats are the most susceptible, some of them having different phenomena from those appearing in the human subject. If the infection be injected intra-peritoneally, it will be found, after 10 or 14 days incubation, the first phenomena will appear in the scrotum as fine poppy seed shining through the albuginea as small glittering tubercles, which have all the appearance of advanced tubercular condition. As the case advances these tubercles are found in the omentum, peritoneum,

lungs, liver, and other organs; finally the animal takes on the cachectic condition and soon dies.

The post-mortems of these animals show that degeneration commences in the parenchymatous tissue of the different organs, while the blood is found to be in a very watery condition.

The preparations were coloured with Gram's solution, which showed the tubercles to be smaller in the centre, but those in the periphery were more virulent. When these tubercles accumulate on the scrotum they form a gummatous ulceration, as described by Krenn.

How this fungus comes to locate itself in the human body is not quite clear, nor can it always be demonstrated, as sections from the human body are found not to contain the sporotrichon, though carefully subjected to Gram's method, while the infection can be transmitted and the morbid phenomena observed.

## FROM OUR SPECIAL CORRESPONDENTS AT HOME.

### SCOTLAND.

**POOR-LAW COMMISSION REPORT.**—The conditions of life in some parts of the Highlands of Scotland are, unfortunately, familiar enough to medical men through the references which are constantly being made to them in connection with medical appointments in that part of the country. Still, it is worth while quoting some paragraphs on the subject from the Majority Report of the Commissioners. In his evidence Dr. Ross, a Medical Officer of Health in the Lews, states that in the parish of Barvas a thousand out of the 1,300 inhabited houses are shockingly defective from a sanitary point of view; men, cattle, and other live stock are housed under one roof without any effective partition wall or separate doors; the excreta, refuse, and slops accumulate in the byre end of the house from spring to spring. Drainage is neglected, and liquid sewage is allowed to escape as best it may. Thinking that the evidence given them might be exaggerated, the Commissioners deputed a committee to report. The Committee thus described the home of a pauper which they visited:—"As we approached the cot of the most distant pauper, we heard the old man singing his psalms, and waited until he had finished, and then entered with one of his married daughters who lived close by. It was the ordinary wigwam style of cot. The floor was rock, and mud, and muck; the fire, before which the old man sat in a little wooden chair, was in the centre of the room; the fowls, which frequented all the houses and made themselves very much at home, were for the most part squatting about amongst the rags on the wooden bed in the inner room." The problem of medical attendance is to secure even a minimum for the inhabitants. The smaller parishes cannot maintain a doctor, and the poverty of the inhabitants makes it impossible for a private practitioner to eke out a bare subsistence. But, besides their poverty, a great deal of callousness exists among the people with regard to calling in a doctor. They are mostly extreme fatalists, and often do not call a doctor on the plea that "the hour has come." Dr. Macdonald, of Stornoway, described the provisions for medical assistance in the island of Lewis thus: "It is a district 72 miles long, with a population of 13,000, scattered over some 40 villages. All the medical assistance available is given by two doctors, 50 miles apart. There is only one driving road, and most of the villages are some distance from the road. The parishes are much cut up by arms of the sea, and villages may be cut off from each other for days, except by walking for days over a trackless moor. There is no provision whatever for isolation of infectious cases. Infectious diseases are endemic, and tuberculosis is becoming general over the island. Seventy per cent. of the deaths are uncertified. The Commissioners add that two remedies were suggested by the Medical Relief Committee in 1904:—(1) A special grant in aid of medical attendance, or (2) the institution of the Irish dispensary system. They are strongly impressed by the need not only for better medical assistance, but by the need for more nurses.

**EDINBURGH SCHOOL BOARD AND THE APPOINTMENT OF MEDICAL INSPECTORS.**—Some time ago the School Board advertised for two Assistant Medical Officers, a man and a woman, at salaries of £250 and £200 respectively. As the latter figure, besides being less than the salary offered to the male Medical Officer, was below the limit fixed by the British Medical Association, no women applied for the post, and the gentleman elected to fill the office subsequently resigned on receiving another appointment. A meeting of registered medical women was held in Edinburgh a week or two ago, at which it was held that the former decision should be adhered to, and that women should not apply for posts at the lower salary. The School Board met the other day, and decided to re-advertise the two posts at salaries of £250, the appointments to be open to men and women. An amendment to advertise for one woman and one man at salaries of £250, and an amendment to adhere to the former arrangement, were put and lost, so that the party of compromise won the day, and if the School Board will only adhere to the spirit as well as the letter of their motion, and appoint a woman as well as a man, they will have succeeded in extricating themselves from an impossible position, and will save their face at the same time.

### BELFAST.

**QUEEN'S UNIVERSITY.**—The Senate of the University met last week, the Chancellor, the Earl of Shaftesbury, K.C.V.O., presiding. The gift of a handsome gold mace from Mr. William Gibson was reported, the mace being on view. The Vice-Chancellor reported that the registration of students was not yet complete, but that already the numbers were far beyond any for years past. A good index of the numbers was to be found in the fact that the class fees already received exceeded by about £1,500 the estimate formed by the University Commission. Sir William Crawford was unanimously elected Hon. Treasurer of the University, and various committees were appointed. It is probable that new buildings will be added at an early date, as the accommodation in various departments is already crowded.

**THE COLERAINE CORONER ON CONSUMPTION.**—A meeting was held last week in Coleraine under the auspices of the Women's National Health Association, at which Dr. H. S. Morrison, Medical Officer of Aghadowey Dispensary District and Coroner for Coleraine, delivered a lecture on "The Influence of Women." After some remarks on the prevailing mortality from tuberculosis in the district, he gave a "straight talk" to the women present, telling them that all the laws on the statute books could never abolish this mortality, but that it was in their power to abolish it by keeping their houses clean and by admitting fresh air and sunshine.

**A SCOTCHMAN ON THE IRISH UNIVERSITIES.**—At a meeting of the Belfast Medical Students' Association held last week, an address was delivered by Dr. G. A. Gibson, of Edinburgh, on "Modern University Ideals." He spoke in terms of warm admiration for the plan on which the Queen's University of Belfast had been formed, and discussed specially the medical curriculum, of which he highly approved. The necessity for the much-talked-of chair of Scholastic Philosophy he recognised, but deplored. The demands of a large portion of the population could not be ignored, even though they introduced the sectarian element. As regards the proposed arrangements for the National University of Ireland and the University College in Dublin, he thought there was reason to fear the future. Continuing, the speaker said: "Instead of trusting to honest work and sound teaching, which were really the only legitimate foundations for a successful educational establishment, the adherents of the new National University had been invoking every influence in order to compel students of medicine to enter the new academic portal and to shun the venerable gates of the Royal College of Surgeons. The terrors of the Church, the threats of Sinn Féin, had been let loose. The fact was notorious. These remarks were not intended to be either ecclesiastical or political in their meaning; all that was contended for was fair play

to everyone. If the new University would manfully and honestly strive to attract students by strenuous exertion in research and in teaching it would speedily attract the respect and esteem of every man of science; but if, on the other hand, it was to persist in a course of conduct like that which it was unfortunately entering upon, it would receive and richly merit the regretful contempt of every right-thinking man."

**DEATH OF DR. ANDREW MCCONNELL.**—One of the senior members of the medical profession in Ulster, and a well-known figure in Belfast, has passed away in the person of Dr. Andrew McConnell. Born in Co. Antrim and educated in Edinburgh, he practised for very many years in Belfast, acting as visiting medical officer to the Union Infirmary till a few years ago. His geniality and kindness of heart, as well as his care and caution in his work, earned him the esteem and affection of all with whom he came in contact. He had ceased to practise for some years past, and found his recreation in the study of history, for, in spite of a very busy professional life, he had always found time to cultivate his literary tastes.

## LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

### VIAMI REMEDIES.

*To the Editor of THE MEDICAL PRESS AND CIRCULAR.*

SIR,—My attention has just been called to a letter published in your issue of November 3rd, dated from Oldham, and signed by a "General Practitioner." Your correspondent boldly accuses the Council of the County Borough of taking money for advertising the Viavi Remedies. It appears from his letters that he caught sight of a notice in a tramcar announcing some free lectures which were to be delivered somewhere in the town by one of the Viavi agents. But why he should venture to assert, as he does, that the Council receives payment for the advertisements displayed in the tramway company's cars, your correspondent does not choose to explain.

For this assumption there is not the slightest foundation in fact. The Council has no pecuniary interest whatever either in the tramways or the advertisements, and has no controlling power over the latter so long as they be not illegal. It is strange that so observant a person should have failed to notice that the tramways are a private, not a municipal, undertaking, seeing that the name of the company is clearly displayed on each of the four sides of every car.

I shall be obliged if you will kindly insert in your next issue this refutation of your anonymous correspondent's erroneous and defamatory statement.

Yours truly,

A. SCARLYN WILSON, D.P.H.,  
Medical Officer of Health.

Health Department, Town Hall, Hastings,  
November 20th, 1909.

[If the construction suggested can fairly be placed on our correspondent's letter of the 3rd inst.—viz., that he "boldly accuses the Council of the County Borough of taking money for advertising the Viavi remedies" in their tramcars, then we unreservedly accept the above statement as exonerating the Hastings Council. It does not seem to us that that is, however, what was meant by our correspondent. (1) It is within the power of any local Council to exercise some amount of control over advertisements displayed within their district. (2) It seems that the municipal authority must necessarily derive income from any trade or business carried on within its area, if only in the one matter of rates. (3) It is hardly conceivable that the towns of Hastings and St. Leonards have made so bad a bargain with the tram companies that they derive no benefit whatever, either by way of rent, or of repair of roads, or of other valuable consideration whereby the Council or the combined Councils benefit from the revenue accruing to the trams. On these grounds we hope that Dr. Wilson will

induce the Hastings Council to inquire more closely into their powers for the regulation of public advertisement, and, where necessary, to take steps to strengthen their by-laws. In any case, we are glad to infer from the tone of Dr. Wilson's letter that he does not differ from our correspondent in his unfavourable view of the Viavi treatment and remedies.—ED. MED. PRESS AND CIRCULAR.]

### A BOARD OF HEALTH AND PHYSIQUE.

*To the Editor of THE MEDICAL PRESS AND CIRCULAR.*

SIR,—In the *Times* of to-day, November 19th, there appears the long letter, which I enclose, from Mr. Sandow, in which he advocates the establishment of "a board of health and physique, with a Cabinet Minister of the right type at its head." Everyone will agree with the arguments Mr. Sandow uses in support of his ideas, and everyone will sympathise with him in a position which makes it impossible for him even remotely to hint at his own claims to the new office the creation of which he suggests. A few days ago there appeared an article occupying half a page in the *Times* in which the qualifications of Mr. Sandow were set forth. The article was not only adorned by a portrait of Mr. Sandow, and pictures of the interior of his palatial Curative Institute; it also contained a photograph of an audience of medical men listening to an exposition of his system, and—more important than all—a portrait of Mr. Labouchere, proprietor of *Truth*, who has inquired into Mr. Sandow's theories and practice, and vouches for their correctness and success. Mr. Sandow is evidently one of the greatest men living in his department of curative treatment. The *Times* article enumerated twenty-four classes of disease, functional and chronic, including all the vital organs—heart, lungs, liver, kidneys, and nervous system—besides such minor complaints as skin diseases, neurasthenia, and ladies' "figures," all curable by Mr. Sandow's "movement treatment," which can be carried out under his personal supervision or at home, under his prescription, and "occupying but a few minutes of the day." It is to be hoped that when Mr. Sandow's valuable suggestion is taken up by the Government, you, Sir, will not fail to impress upon them his unquestionable claims to the new seat in the Cabinet.

I am, Sir, yours truly,

RUSTICS

November 19th, 1909.

### A MEMBERSHIP DIPLOMA OF THE R.C.S.I.

*To the Editor of THE MEDICAL PRESS AND CIRCULAR.*

SIR,—Charity begins at home, and I have often wondered why you have never advocated the granting of a membership diploma to the licentiates of the R.C.S.I. The movement for giving the membership to the Scotch licentiates seems to have failed, but perhaps the Council of the Irish College may not be so selfish. In any case the instinct of self-preservation ought to stimulate them to give this small concession of membership to their licentiates, and so put them on a level with the English diplomates.

The College has recently raised the standard of examination for their Fellowship to the level of the R.C.S., England, but the licentiateship requires levelling up, as it is well known to be as searching an examination as is required from the candidates for the English College.

Hoping something may be done in this matter by my old College,

I am, Sir, yours truly,  
AN OLD R.C.S.I. STUDENT.

## OBITUARY.

SIR WILLIAM THOMSON, C.B., M.A., M.D.  
F.R.C.S.I.,

Honorary Surgeon to the King in Ireland.

WITH much regret we record the death of Sir William Thomson, Honorary Surgeon to the King in Ireland, and Senior Surgeon to the Richmond Hospital, Dublin. For several months his life had been ebbing

out, and death relieved him on Saturday, November 13th. He was in his sixty-seventh year.

Though born in Ireland, Thomson was the son of a native of Lanarkshire, but when he was a lad he settled with his mother, after his father's death, in Galway. Here he did journalistic work on his step-father's paper, the *Galway Express*. He later joined the staff of the *Daily Express* in Dublin as a reporter, and became sub-editor. His thoughts had run, however, to the career of medicine, and, while still a journalist, he attended lectures at the old Carmichael School of Medicine, and at Queen's College, Galway. In the latter institution he formed friendships with several men who have since become famous, the most notable being, perhaps, Lord MacDonell. On taking his medical degrees, Thomson settled in Dublin, and before long became Lecturer in Anatomy in the Carmichael School, and a member of the surgical staff of the Richmond Hospital. As time went on, he became one of the best known surgical teachers and surgeons in Dublin, and in 1896 he was elected President of the Royal College of Surgeons. In 1897 he received the honour of knighthood.

In the beginning of 1900, when the generosity of Lord Iveagh equipped an Irish Hospital for service in the Boer War, Sir William was placed in charge. By his foresight and power of organisation, the Hospital was a great success, and Lord Roberts expressed in warm terms his appreciation of its services.

Sir William Thomson took a keen interest in everything of importance to the medical profession. As Commissioner for the *British Medical Journal*, he undertook many years ago an investigation of the conditions of the Irish Poor-law Service, and his report still stands as a document which must be carefully studied by all interested in the problem of Poor-law reform in Ireland.

On the foundation of the Royal Academy of Medicine in Ireland, by the amalgamation of pre-existing societies, Thomson was elected General Secretary, and for several years it was his duty to edit the *Transactions*. For some years he was Direct Representative for Ireland on the General Medical Council. He was a frequent contributor to the medical journals.

His wife, who is a sister of Sir Thornley Stoker, survives him, as do a son and daughter. To them the hearty sympathy of the profession goes out.

Sir William Whitla, President of the British Medical Association, writes: "You place a difficulty before me when you ask me to give you a short notice of my personal appreciation of the late Sir William Thomson, because I feel anything that I can write of him must be in the language of hyperbole, which is liable to sound an exaggeration in the ears of those who were not fortunate in possessing an intimate acquaintance with his inner life and true character."

"In the obituary notices which have already appeared in the medical and lay press, the fact which stands out most prominently is the enormous amount of strenuous public work freely undertaken and persistently carried out by this distinguished Dublin surgeon in the interest of the profession in Ireland and Great Britain. For more than a quarter of a century he maintained a foremost position in the fighting ranks of those struggling against the scandalous hardships inflicted upon the Poor-law Medical Officers of Ireland, whilst during the same period we find him labouring with zeal to weld the heterogeneous elements of the Dublin medical societies into a Royal Academy of Medicine, and with rare courage taking upon his shoulders the heavy responsibility of inaugurating a scheme for the building of the new Richmond Hospital. We next see him at the call of duty leading the officers of Lord Iveagh's Irish Hospital on the march with Lord Roberts to Pretoria, where the best surgical work in the Boer campaign was accomplished."

"Perhaps the most happy years of his strenuous professional life were those in which he represented the practitioners of Ireland on the General Medical Council. Throwing himself into every movement for the reform of medical education, he proved himself a ready, resourceful, and courageous debater. Few

who listened to his fearless advocacy of some cherished scheme for the advancement of his profession, or for the amelioration of the hard lot of the less favoured members of the Dispensary Medical Officers could suspect that the courageous advocate was the possessor of a heart as tender and sensitive as ever beat in a human breast.

"Being honoured and privileged for more than 20 years with his confidence and friendship, I was intimately acquainted with the inward springs of his actions and motives. The attribute which impressed me most, and which was ever evident in our many happy confidential interviews, was Sir William Thomson's chivalrous sense of honour. No temptation of improving his own high professional position, or of gaining the applause of men, was ever for a moment permitted by him to cause the slightest deviation from the high ideal which he had set up for achievement. In positions of delicacy where there was the obvious or almost certain danger of his action being misunderstood or misrepresented, an event from which his sensitive nature recoiled, he never swerved for an instant in his decision to pursue the straight path, always maintaining that the best reward which could come to a man was the proud consciousness 'of having played the game honestly and fearlessly,' as he was accustomed to say during private and confidential conversation. Though a man of the world in the higher sense of this term, with broad culture and a profound knowledge of men and their motives, it was inevitable that with his sensitive nature he must pay the penalty of all noble souls, and wear himself out prematurely in the ceaseless warfare from which he never shrank. It was therefore no great surprise to his intimate friends that within the last two years of his busy life symptoms of general arterial sclerosis set in, accompanied by serious physical signs of heart failure, entailing great suffering, which was borne with heroic fortitude and Christian resignation. Only his life-long friend, the late Sir Thomas Moffett, could have done justice to the many estimable qualities of this truly noble spirit, whose removal has left a dismal blank in the ranks of Irish medicine, but to all who knew him well Sir William Thomson has left an ever inspiring memory, which will continue to bear fruit in the years to come."

#### R. THEODORE STACK, M.D., F.R.C.S.I.

THE news that Richard Theodore Stack has joined the majority will come to many of our readers as a surprise. He has been so long removed from active work (nearly twelve years) that the recollection of his striking figure has become somewhat dim; yet he was a man of such parts as call for more than an ordinary obituary notice, and it is only fitting that his work should be recorded as it deserves.

He was born at Mullaghmore, Omagh, Co. Tyrone, and educated at the Royal School, Raphoe, and Trinity College, Dublin. He took his B.A. and M.B. degrees (first place) in 1873, B.Ch. (first place) in the same year, M.D. in 1874, and M.Ch. in 1875. He had won a classical scholarship in 1868. His distinguished medical career brought him the medical scholarship in 1872, and the travelling prizes, medical in 1873 and surgical in 1874, a record of which any man might be proud, and from which it will be seen that his fine natural ability was enhanced by an industry and application which brought it, one might almost say, to full fruition. In 1873 we find him grinding, along with Yeo and Harvey, in Trinity College, having succeeded to Dr., now Sir Charles Ball, in that triumvirate, keen on the then newer methods of investigation and teaching, and on microscopy, etc.; 1874 saw him in Vienna, and in July of that year he went to Blaenavon, South Wales, as *locum tenens* for his friend Ball during the latter's marriage and honeymoon. While there he was stricken down by rheumatic fever, which, following previous attacks of that disease and scarlatina, left him physically crippled in heart and hearing. It is characteristic of the man that, in his friend's absence, rather than allow him to be worried by the news that his *locum tenens* was laid

up, Stack directed the practice from his sick bed daily by means of assistants, at a time when rest was more essential to his well-being than anything else.

On his recovery he obtained an appointment as physician to the Children's Hospital in Manchester, and while he was performing his duties there he noticed that the children's voices in England seemed softer and less powerful than those he had been accustomed to hear in Ireland. This, which was really due to his advancing deafness, reached its climax when he found himself unable to hear the heart sounds by the stethoscope, and, in a word, his hearing became so bad as to render necessary the resignation of his appointment. None but medical men can fully realise what this misfortune meant; the plain fact is that his deafness had robbed him of his profession, and a career full of brilliant promise was thus at the outset effectually blighted.

This blow, for the moment, staggered him, and he returned to Ireland, to use his own words, "like a hunted hare." He sought the advice of his friends in Dublin, among others, the late Professor Haughton, who suggested he should turn his attention to dentistry. Plucking up courage, he adopted the idea, and, with characteristic energy, he went immediately to study his new profession at the Harvard University, where he took the D.M.D. Harv. in 1877. In this year he returned to Dublin, and practised until 1897, when his health finally gave way. The tragic abandonment of his medical career had excited among those who knew him the keenest sympathy, and his medical brethren, recognising the same ability in his new calling they had seen in the old, gathered to his support with the generosity which has ever characterised the medical profession. Diffident as he was at all times in speaking of himself, those who stood by him at that time may not be aware of how deeply he felt their kindness; but the writer has heard him express himself so frequently and clearly on this, the one gleam of light in his dark days, as to be able to say that he was more grateful than he could express. His practice in Dublin prospered, and he rapidly rose to be one of the leading dentists of that city. In 1897 a stroke of paralysis necessitated his withdrawal from practice, and since that date he lived in retirement. His contributions to the literature of his profession, which had begun when as a medical man he wrote the "Pathology and Diagnosis of Abdominal Tumours in the Male," a work which received the gold medal of the Dublin Pathological Society in 1873, were both numerous and enlightening. Unfortunately, few of them have been preserved. His dental contribution to the Transactions of the Academy of Medicine, Ireland, Vol. I., on "Replantation and Transplantation of Teeth," is still regarded as a classic. Many, however, as were his doings in the world of scientific research, what must be regarded as his life's work lay in another direction. He came back from America fired with the project of founding a School of Dentistry in Dublin. Towards this laudable end he bent every power of which he was master, and with the help of the Corbetts, senior and junior, Robert Moore, John Andrew Baker, William Booth Pearsall, and Arthur Baker, a committee was formed to forward the scheme. As a result of their united labours, a Dental Hospital was opened in York Street in 1879. Its growth in size and in usefulness, both there and after its removal to Lincoln Place, are common property, and, while it is obvious that no man could have performed such a task except with willing and able help from others, it is no overstatement to say that, while his enthusiasm gave it being, he was equally the mainspring in its subsequent progress to usefulness as an educational centre and as a charitable institution. His knowledge of the needs of his profession educationally was early recognised by the Royal College of Surgeons in Ireland, when it appointed him Professor of Dentistry and their adviser generally in matters appertaining to dental education. The British Dental Association also recognised his outstanding eminence by conferring upon him the honour of its Presidency in 1897, when their annual meeting was held in Dublin. That meeting was, in many respects, a record and an epoch-

making event. One of its features initiated by him was the demonstration of the use of X-rays in Dentistry by Mr. W. S. Haughton, an exhibition of scientific method which then little known made a great impression.

In the space at our disposal it is impossible to deal in detail with the work Stack did. From the facts outlined it will be seen that his activity followed a bent the reverse of selfish. While it had, as its aim, the advancement of the status of his profession and the cause of charity, it had the collateral effect of breaking down the isolation which at that time existed between individual dental practitioners and bringing them together and welding them into a cohesive whole.

While the former may be regarded as his work as an educationalist, the latter claims notice as being his doing as a man, and it is a question whether the latter was not a truly greater achievement than the former.

In social life Stack, from his deafness, took to very prominent part, but he was not debarred thereby from occupying a well-known place in the various circles of friends among whom he moved. As a sportsman, he was a good shot (his first attack of rheumatic fever was contracted as a boy from a wetting got after snipe one winter day at Raphoe), a good fisherman, a sailor, and a golfer. He played a fair game of billiards, and from all this we may gather that, while he was largely debarred from conversation, he loved to associate with his fellowmen. His personality attracted most men, and has been described by many as magnetic. His smile, which lit up a face ordinarily pensive almost to sadness, transfused, more than illuminated, his expression, and his unflinching cheerfulness was the best index of his self-dependent mind and character. Among his students he was regarded with something nearly akin to hero-worship, and to all who knew him his faults were seen to be merely on the surface, and were forgotten at the sound of his voice. His life is a record of work done under the gravest physical disabilities, and, if there be any virtue in example, what he was and what he has done must serve as a stimulus to others under like circumstances.

## SPECIAL ARTICLES.

### SUGGESTED AMALGAMATION OF THE ENGLISH DIPLOMA GRANTING CORPORATIONS WITH THE UNIVERSITY OF LONDON.

At the recent annual dinner of the Apothecaries' Society an important suggestion was made by Mr. A. T. Norton, C.B., F.R.C.S., in proposing the toast of the Royal Colleges of the Physicians of London and the Surgeons of England.

My Lord Mayor, Master, and Gentlemen,

I am glad to have the opportunity of proposing the toast of the Colleges of Physicians and Surgeons this evening.

At the present moment, he said, much anxiety and grave responsibility rested on the Examining Bodies of London.

Last year he had foreshadowed the possibility of a combination of the London Examining Bodies, with the object of urging the Government to make such arrangement that the students of London should be able to obtain a University Degree on a parallel with that granted by the Universities of Scotland and Ireland and the Provincial Universities of England.

Since then something had been attempted, but we were in the same position as we were a year ago—indeed 15 or 20 years ago.

If the students of London could not obtain a University Degree they would leave London. They would not come to London. There would be no students of London. This would obviously be a serious matter for medical students, for the medical education and clinical instruction given at the London schools, which could not be equalled in the provinces, would be lost to them. But it would be a catastrophe

for London Examining Bodies and for the London Medical Schools.

He could not conceive it possible that it could be permitted that this Society should be wiped out as an Examining Body, or that this City Company, with its valuable property, attendant privileges, and important investments should be lost to the medical profession. But it certainly would be so if circumstances remained as they now were. Further, he might say that whatever happened to this Company would likewise happen to the two Royal Colleges, and most assuredly they would, though perhaps more gradually than ourselves, cease to be the Examiners of the coming race of general practitioners.

He did not see that the University of London should be called upon to descend from its high pedestal. If it should do so, it would crush the Diploma Granting Bodies unless it incorporated them into itself, and if that took place it would certainly lose that grand reputation which it had ever maintained since its foundation.

That evening there were present representatives of many of the Universities and of the Examining Bodies, and he would ask their permission to make a suggestion, advanced entirely on his own responsibility. He held no brief for the Apothecaries' Company. He could not, of course, enter fully into detail that evening. In a word, he would urge the creation of a new University, to be called the "State University of Medicine," and it should grant the degree only of Doctor of Medicine and Surgery. It should incorporate all Diploma Granting Bodies in the three divisions of the United Kingdom—England, Scotland and Ireland.

There should be but one examination, one set of questions for all, one equalised examination. There should no longer be, and there could not be, a competition of one Examining Body with another by the diminution of the severity of its examinations.

There should be a Council in England, in Scotland, and in Ireland, and a General Council common to all, strengthened by representatives of the State. This Common Council could easily arrange such matters as divisions of fees and curriculum, and other details. He believed that the obstacles to such a University—a one portal to the profession—were few and easy to overcome.

The Universities might at first raise objections, but they could be placated. The great Universities would scarcely be interfered with. They would have to accept the State Degree, and could add what subjects they liked to their own examination. If there should be loss in fees, that loss would be a grant made good from the funds of the State University, taking into consideration the double examination. Those Universities which have taken to examining the general practitioner within the last 25 years or so are they who have bereft us of our inheritance. Yet they should receive justice. The objections of such Universities as that of Edinburgh, which is a great "General Practitioner" Examination University, must receive local consideration and not be allowed to lose either its graduates or its fees.

## REVIEWS OF BOOKS.

### WALSH'S QUACKS AND SECRET REMEDIES. (a)

THIS little book deals practically with a subject to which of late a great deal of attention has been paid both in our own and in other countries, more especially in Australia, Germany, and the United States of America. Not long ago the British Medical Association published a reprint of a series of articles dealing with secret remedies, in which the claims of individual preparations were considered, together with an analysis of their ingredients and estimated cost. The American Medical Association has published a similar book, while the report of the Australasian Royal Commission has furnished an immense work of

reference on the whole subject. Dr. Walsh has gone a step further towards a much-needed control of irregular medical practice and of false remedies, by giving a brief historical sketch of medical legislation since its origin in the days of King Henry VIII., and a careful summary of existing legislation, with suggestions and recommendations for their amendment. He rightly, in our opinion, insists upon the desirability of using existing legislation as far as may be possible instead of attempting to secure the passing of fresh laws. He suggests, among other things, the need of certain reforms in the constitution and policy of the General Medical Council. By the amendment of Section XL. of the Medical Act of 1858, it should be possible to render the control of irregular medical practice a reality instead of a thing of no value, as it is under present circumstances. If the author's contention be correct, namely, that the sale of secret remedies for the professed cure of maladies is simply a branch of unqualified practice, then it would be possible to proceed against many quack remedies with an amended Section XL. A perusal of this book will show that there are many legal ways in which the problem of prosecution of offenders may be brought about. One great want is that of a strong prosecuting body, with ample means to pay the costs of legal action. Dr. Walsh suggests that perhaps the General Medical Council might take up the duty, and that the necessary funds might be raised by rendering the registration of medical men compulsory instead of optional, and by imposing an annual registration fee, as in the case of the lawyers. In view of the recent action of the General Medical Council and of the coming Government inquiry, this book should be of value to all interested in a matter of vital importance, not only to the medical profession but also to the welfare of the community.

## MEDICAL NEWS IN BRIEF.

### The Police and an Injured Prisoner.

RECENTLY, at Battersea, Mr. Troutbeck held an inquest on Charles Highfield, æt. 72, a homeless man, well known at Putney, and believed to have been a soldier. On the evening of October 29th he was found lying on Putney Common, was taken to the police station, and was charged with drunkenness. A constable noticed that his ankle was swollen, but as he was always lame no attention was called to this. Station-Sergeant Bailey stated that Highfield was able to answer questions rationally. The witness did not think it a case for a doctor. He did not see any sign of injury, and when he visited him in his cell the man said he was all right. Other evidence showed that when visited from time to time Highfield said he was all right; at midnight he complained of pain. A doctor was then called in, and he directed his removal to Wandsworth Infirmary. There he died on Monday. Dr. Neal, the Medical Superintendent, ascribed death to heart failure following on a fractured ankle and a broken arm-bone. These injuries, he said, were probably caused on the day the man was found. Sub-Divisional Inspector Jackson said Highfield told him at the infirmary that on October 29th he had been drinking rum all the morning with a man with whom he afterwards went for a ride in a cart. They were thrown out, and he remembered nothing more. The station-sergeant, said the inspector, should have called a doctor. No discretion was given him in cases where illness or injury might be suspected. The matter had been investigated and dealt with by the police authorities. The jury found that death resulted from the injuries, and "they called attention to the neglect in not calling a doctor at the station." The Coroner observed that the police were careful in such matters, and it was rarely indeed that an injured man was not attended to.

Miss ELLISON, late of St. Thomas's Hospital, has been elected Matron of the Royal City of Dublin Hospital.

(a) "Quacks, Secret Remedies and the Public Health." By David Walsh, M.D. London: Baillière, Tindall & Cox, Henrietta Street, Covent Garden. 1909. Price 1s. 6d. net.



## NOTICES TO CORRESPONDENTS, &c.

**CORRESPONDENTS** requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

### SUBSCRIPTIONS.

SUBSCRIPTIONS may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s.; post free at home or abroad. Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially-appointed agents. Indian subscriptions are Rs 15.12. Messrs. Dawson and Sons are our special agents for Canada.

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M. D. (Boston, U.S.A.).—Your important letter has been placed in hands from which in due course an answer will, no doubt, reach you.

CANDIDATE.—M.D., St. Andrews, or M.D., Durham, would in this country rank before M.D., Brux.

VICTIM.—Damages against the quack named could probably be obtained for the deceit and injury described. The commonest of common juries could appreciate the fraud, but you could have a special jury. Consult a solicitor.

COLONIAL.—Why not avail yourself of the post-graduate teaching now to be had in London?

PARTNERSHIP AGREEMENT.—The law will not uphold conditions that are extreme or unconscionable. You could not probably prevent practice at so great a distance from your village; use of the firm's title is another matter.

MEDICAL BURGESS.—The Town Council is the sanitary and educational authority, and administers all legislation in these departments of local government.

DR. DE G. G.—Thanks for letter. We shall be pleased to publish your note as a short original communication. Please add title of paper. The news as to the training of the first Congo native Christian work is interesting from many points of view.

GLASGOW SUBSCRIBER.—The climate of the Riviera, compared with many places now easily accessible, is inferior in many respects when the requirements are uniform high temperature and dryness. Algiers, Egypt, and the West Indies, or even Sicily, might better suit the case of our correspondent.

## Meetings of the Societies, Lectures, &c.

WEDNESDAY, NOVEMBER 24TH.

HUNTERIAN SOCIETY (London Hospital, E.).—4 p.m.: Clinical Afternoon.

MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22 Chancery Street, W.C.).—4 p.m.: Mr. Lockhart Mummery: Clinique (Surgical). 5.15 p.m.: Dr. Leonard Williams: The Diagnosis of Thyroid Inadequacy.

NORTH-EAST LONDON POST-GRADUATE COLLEGE (Prince of Wales's General Hospital, Tottenham, N.).—Clinics: 2.30 p.m.: Medical Out-patient (Dr. T. R. Whipple); Skin (Dr. G. M. Meachen); Eye (Mr. R. P. Brooks). 3 p.m.: X-Rays (Dr. H. Pirie).

THURSDAY, NOVEMBER 25TH.

ROYAL SOCIETY OF MEDICINE (NEUROLOGICAL SECTION) (20 Hanover Square, W.).—8.30 p.m.: Hughlings Jackson Lecture: Sir William Gowers, F.R.S.: Special Sense Discharges in Organic Disease.

HARVEIAN SOCIETY OF LONDON (Stafford Rooms, Titchborne Street, W.).—8.30 p.m.: Dr. A. Morison: The Nature and Treatment of Angina Pectoris.—Mr. J. G. French: Chronic Middle Ear Suppuration—the Sequelae and Treatment.

MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22 Chancery Street, W.C.).—4 p.m.: Sir Jonathan Hutchinson: Clinique (Surgical). 5.15 p.m.: Dr. Stanley Barnes (Birmingham): Disease of the Cerebral Arteries.

NORTH-EAST LONDON POST-GRADUATE COLLEGE (Prince of Wales's General Hospital, Tottenham, N.).—2.30 p.m.: Gynecological Operations (Dr. A. E. Giles). Clinics: Medical Out-patient (Dr. A. J. Whiting); Surgical (Mr. Carson). 3 p.m.: Medical In-patient (Dr. G. P. Chappel).

HOSPITAL FOR SICK CHILDREN (UNIVERSITY OF LONDON) (Great Ormond Street, W.C.).—4 p.m.: Lecture (Surgical): Mr. Kellock: The Minor Surgery of Children.

ST. JOHN'S HOSPITAL FOR DISEASES OF THE SKIN (Leicester Square, W.C.).—6 p.m.: Chesterfield Lecture: Syphilis as it modifies other Eruptions of the Skin: Symptoms, Diagnosis, and Treatment.

FRIDAY, NOVEMBER 26TH.

ROYAL SOCIETY OF MEDICINE (SECTION FOR THE STUDY OF DISEASE IN CHILDREN) (20 Hanover Square, W.).—4.30 p.m.: Cases by Dr. A. E. Garrod, Dr. R. Hutchinson, Mr. K. Bremer (for D. F. E. Batten), Mr. Sydney Stephenson, Mr. O. L. Addison. Specimens will be shown by Dr. R. C. Jewsbury, Dr. H. D. Rolleston and Dr. A. C. D. Firth, Dr. G. Carpenter, Dr. A. C. D. Firth and Dr. E. I. Spriggs. Papers: Mr. K. Bremer:

The Variability and Relative Frequency of the Lesions in Poliomyelitis. Mr. P. Lockhart Mummery: A Case of Strangulation of the Small Intestine by a Band in a child, aged 15 months.

ROYAL SOCIETY OF MEDICINE (EPIDEMIOLOGICAL SECTION) (20, Hanover Square, W.).—8.30 p.m.: Paper: Mr. H. G. Armstrong: Nine Epidemics of Measles at a Public School. Mr. Robert Milne: Scarlet Fever—its Home Treatment.

MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22 Chancery Street, W.C.).—4 p.m.: Dr. Dan Mackenzie: Clinique (Ear, Nose and Throat).

NORTH-EAST LONDON POST-GRADUATE COLLEGE (Prince of Wales's General Hospital, Tottenham, N.).—10 a.m.: Clinic: Surgical Out-patient (Mr. H. Evans). 2.30 p.m.: Operations Clinics: Medical Out-patient (Dr. A. G. Auld); Eye (Mr. R. P. Brooks). 3 p.m.: Medical In-patient (Dr. R. M. Leslie).

CENTRAL LONDON THROAT AND EAR HOSPITAL (Gray's Inn Road, W.C.).—3.45 p.m.: Lecture: Dr. W. Wingrave: Clinical Pathology.

MONDAY, NOVEMBER 29TH.

MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22 Chancery Street, W.C.).—4 p.m.: Dr. J. M. H. MacLeod: Clinique (Skin). 5.15 p.m.: Mr. H. A. Ballance (Norwich): Fractures of the Lower End of the Humerus in Children (illustrated).

TUESDAY, NOVEMBER 30TH.

MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22 Chancery Street, W.C.).—4 p.m.: Dr. J. W. Carr: Clinique (Medical). 5.15 p.m.: Mr. Harold J. Stiles (Edinburgh): Treatment of Hernia in Infants and Young Children.

## Appointments.

COATS, GEORGE, M.D. (Glasg.), F.R.C.S. Eng., Assistant Surgeon to the Royal London Ophthalmic (Moorfields) Hospital.

DAVIES, IVOR J., M.B., B.S. Lond., Resident Medical Officer at the Farringdon General Dispensary, E.C.

GRIFFITHS, JOHN S., L.R.C.P. Lond., M.R.C.S., County Director of the British Red Cross Society for Bristol.

HAMILTON, ARCHIBALD, M.R.C.S., L.R.C.P., House Surgeon at the Chelsea Hospital for Women.

WARING, H. J., M.S. Lond., F.R.C.S., Surgeon to St. Bartholomew's Hospital.

## Vacancies.

West Riding Asylum, Wakefield.—Assistant Medical Officer. Salary £140 per annum, with apartments, board, washing, and attendance. Applications to the Medical Director at the Asylum.

North Cambridgeshire Hospital, Wisbech.—Resident Medical Officer. Salary £150 per annum, with unfurnished house. Applications to William F. Bray, Secretary.

Cancer Hospital (Free), Fulham Road, London, S.W.—Physiological Chemist to the Cancer Institute. Salary £350 per annum. Application to the Secretary.

The Hospital for Sick Children, Great Ormond Street, London, W.C.—Assistant Casualty Medical Officer. Salary, for six months, £30, and washing allowance £2 10s., with board and residence in the hospital. Applications to the Secretary. (See advt.)

The Hospital for Sick Children, Great Ormond Street, W.C.—Ophthalmic Surgeon. Applications to the Secretary. (See advt.)

The Hospital for Sick Children, Great Ormond Street, London, W.C.—Resident Medical Superintendent. Salary 100 guineas per annum, with board and residence in the Hospital, and £5 washing allowance. (See advt.)

The Hospital for Sick Children, Great Ormond Street, London, W.C.—House Surgeon. Applications to the Secretary. Salary for six months, £30, washing allowance £2 10s., with board and residence in the Hospital. (See advt.)

## Births.

SCORESBY-JACKSON.—On Oct. 28, at Abu Rood, Rajputana, India, the wife of Thomas Scoresby-Jackson, M.B., etc., of a daughter.

WARREN.—On Nov. 20, at 15 Lansdowne Crescent, London, W. the wife of Alfred C. Warren, M.D. Cantab., of a daughter.

## Marriages.

CLUDE-HAILEY.—On Nov. 22nd, at St. Outhbert's Church, Philbeach Gardens, London, S.W., William Leslie Brutton Clude to Violet Madeline Hailey, youngest daughter of the late Hammett Hailey, M.D., and Mrs. Hailey, Philbeach Gardens, London, S.W.

## Deaths.

SWEETLOVE.—On Nov. 18th, at Sutton, Surrey, John Wallace Sweetlove, M.R.C.S., L.R.C.P., elder son of the late Robert Sweetlove, of St. Leonards-on-Sea, and of Mrs. Sweetlove, of East Molesey, aged 38 years.

**REQUIRE D** for agreeable position with quite exceptional prospects, a medical man with much experience of Abdominal Hernia and Truss Fitting. Must be intelligent, energetic, and anxious to create for himself by conscientious and assiduous attention to work a first-class situation. Also required expert translator from the German for a treatise on E. PEARL. Write stating full particulars to Box, No. 10, MEDICAL PRESS AND CIRCULAR.

# THE MEDICAL PRESS AND CIRCULAR.

"SALUS POPULI SUPREMA LEX."

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## NOTES AND COMMENTS.

### Arsenical Wall-paper

THE death of a prominent Vienna financier has been ascribed to poisoning from an arsenical wall-paper. The medical attendants, according to the special correspondent of a London newspaper, state death to have been due to calcification of arteries, "accelerated by the poison contained in the green paper of his studio and reception-room." It must be owned that the alleged active agency of the incriminated wall-paper would be more convincing in the absence of a concurrent malady of a serious nature. The evidence, however, appears to have been considered sufficient by the Vienna Public Prosecutor, who, after investigation by the police, holds the firm that supplied the wall-paper a year ago responsible. The whole stock of that particular paper, moreover, has been seized by the police. The final fact with which we British as a nation are concerned is, that the arsenical paper was imported by a Vienna firm from England. If this be the case, there seems little excuse for the legislature that still permits the manufacture and sale of papers containing arsenical pigments. The harmfulness of hanging paper thus prepared has been known to medical science for two or three generations, and it is a standing reproach to our national common-sense that so insidious a danger to health should be permitted to linger amongst our industries. Plenty of vivid green and other arsenical tints can be imitated precisely without the use of that or any other injurious metal. But the facts have still to

### And other Poisonous Metals.

be proved. If arsenic be used by our wall-paper makers, it can only be to an extremely small extent, and before we admit the truth of the Austrian innuendo, the case must be proved up to the hilt. For all that, it must be confessed that it took many years of effort to eliminate the poisonous form of phosphorus from our industries. Lead has been only partially eliminated, for in spite of a vast deal of industrial legislation, many cases of plumbism are reported annually. A large proportion of this mischief arises in connection with lead glaze. Now it has been shown that equally good results can be obtained by the use of a leadless glaze. Some day that fact will penetrate the recesses of the Home Office, and steps will then be taken, it is hoped, to remove this preventable loss of industrial life by the compulsory substitution of leadless for the prevailing lead glazes. The curious compound of conservatism and enlightened progress that characterises the Anglo-Saxon character is never more apparent than in their treatment of a matter of this sort. The British lead the van, and always have led the van, in the legislative protection of industrial life, but having boldly taken the

first great steps, they permit details to drift on for generations without the slightest attempt at remedy. Nevertheless, our sanitarians have much to be thankful for in many directions.

### Sanitation of Malta.

IN our issue for the 10th of last month, under the heading "Sanitation, General and Special," we deprecated mixing up the results of general and special hygienic efforts, dealing more particularly with the reduction of Malta fever among soldiers and sailors by prohibiting the use of goats' milk. Unfortunately, this fallacy has been flaunted in the lay press by a medical man notorious for his opposition to compulsory vaccination, and Mr. Lupton, M.P., asked the Secretary for War, on Thursday last, whether sanitary improvements, in the way of drainage and cleansing of the harbour, had been effected in Malta; if a large portion of the garrison had been removed from the low-lying barracks at St. Elmo to new barracks on the hill; if the cases of fever in the garrison had been reduced to a small proportion of their former number; if he would remove the prohibition on the use of goats' milk by the garrison, the latter having been conclusively proved "not guilty" by a medical writer? Mr. Lupton then wound up with an *ad misericordiam* plea on behalf of the farmers of the island. The Secretary of State for War (Mr. Haldane) is, fortunately for medicine on this occasion, a member of the bar, and he has evidently been able to weigh the evidence for and against the goats' milk. In his reply he presented an overwhelming case against the milk, saying it was "so marked that no responsible Minister who did not wish to be regarded as weak and incompetent would venture to remove the prohibition for the use of goats' milk by the garrison," a remark received by cheers and laughter. It seems to us that Mr. Lupton, like many worthy persons not read in the methods of scientific thought, attaches too great importance to single and uncorroborated utterance.

### Laxity in Medical Certification.

It must be admitted that, to a certain type of professional conscience, a laxity in the signing of certificates, be they paid for or otherwise, is looked upon casually as a quite moral offence. In much the same way, many persons are ready to defraud the revenue by smuggling, whereas they would hold any other ordinary breach of the law as anathema. Yet both the smuggler and the careless attestor of certificates is apt to be caught now and then in the act, whereupon follows the Nemesis of speedy exposure and punishment. At the disciplinary sitting of the General Medical Council, last week, a

London practitioner was convicted, in that while he was a certifying surgeon under the Factory and Workshops Act, 1901, he had employed another registered practitioner to conduct examinations for him, having signed by himself certificates that he had personally examined certain persons on certain dates and that they were fit to perform work on which they were engaged. On these grounds the defendant was charged with having systematically attempted to mislead the factory inspector. The facts being proved, the Council had obviously no choice but to find him guilty of infamous conduct, in a professional sense, and to strike his name off the *Register*. All medical men who are tempted to stretch a point in signing certificates, whether from good nature, laziness or want of care, will do well to think of the unpleasant consequences that may follow at any moment from their unwise action.

#### Unqualified Electrical Treatment.

LAST week an action was successfully brought for damages for personal injuries against the Dowsing Radiant Heat Company. The plaintiff was treated with a high frequency current, and got burnt, apparently, because of some metallic braid on plaintiff's skirt. A qualified medical expert stated as his opinion that high frequency required skilled administration. The jury returned a verdict for the plaintiff to the tune of £60 damages, and the judge observed that there was nothing to complain of with regard to the defendants, the occurrence being more of an accident than anything else. With all due deference to his lordship's views, it is difficult to see in what material respect unqualified electrical treatment differs from any other kind of unqualified medical practice. It seems clear enough that the proper administration of electricity for curative purposes demands special medical training, above and in addition to special technical knowledge of electrical matters. Should a person suffer any injury through the administration of electricity by an unqualified person, it seems that the latter should be liable to heavy damages. Had it not been for the supineness of the Royal College of Physicians of London for the last four hundred years the host of unqualified medical practitioners would never have been permitted to come into existence. As things go, we have the extraordinary spectacle of a judge on the King's Bench who sees "nothing to complain of" in the exercise of medical functions by unlicensed persons.

#### Counter- prescribing.

ON the 22nd ult. the three Direct Representatives of England and Wales, Dr. Langley Browne (West Bromwich), Dr. Latimer (Swansea), and Dr. L. S. McManus (London), met the members of the Metropolitan branch. They gave an interesting account of the work of the Council and of the part they had taken, and hoped to take, in reforms. One of the most encouraging things from the point of view of the general practitioner is the opening of the campaign against unqualified practice. There was little discussion upon the speeches, and, curiously enough, the main subject discussed was that of counter-prescribing. Dr. McManus explained that some years ago the Council had conferred with the Pharmaceutical Society upon this matter, and the position taken by the pharmacists was, "Let medical men drop dispensing and we chemists will stop prescribing." That was apparently regarded as a deadlock on both sides. We venture to differ absolutely from a conclusion that we regard as futile and illogical. Medical men are perfectly

within their right in dispensing, and had the profession been properly protected by the colleges the Pharmaceutical Society would never have come into existence. On the other hand, the chemist who prescribes is committing a gross act of unqualified medical practice, as he will some day find to his cost when the control of unlicensed practice is put on a sound footing. For the pot to call the kettle black when the pot has got nothing to stand on is to put forth a foolish variant indeed of the old fable!

## LEADING ARTICLES.

### THE GENERAL MEDICAL COUNCIL.

THE session of the General Medical Council which began last week is not likely to be marked by any momentous issues. The address of the President, Sir Donald McAlister, was devoted chiefly to the official account of communications with colonies and dependencies regarding the Medical Acts, and of work done by the Pharmacopœia and other committees. The important question of anæsthetics was mentioned, and it was stated that the committee appointed to deal with the proposals for legislation upon this subject had been officially informed that there was no likelihood of anything further being done in the present parliamentary session, but the Chairman of the Departmental Committee had asked that any further Council resolutions dealing with the matter should be submitted to him. As regards legislation on this particular point, it certainly seems desirable that Parliament should be guided by the advice of the most authoritative medical opinions that can be obtained. It would be unwise to attach undue weight, for instance, to the views of anæsthetists, of surgeons, of teachers in medical schools, of dentists, of coroners, of lawyers, or of the intelligent man in the street. Any sound conclusions must be based on a careful and impartial examination of the subject from all points of view. Above all, it should be borne in mind that, owing to the lack of sufficient data, the basis of the science of anæsthetics is faulty, and that meanwhile legislation must be to a corresponding degree tentative. Sir Donald McAlister also alluded to the objections taken in May last, on legal grounds, to certain provisions in the proposed draft charter of the British Medical Association, which had been communicated to the President of the Privy Council, and that it was probable that an amended draft would in due course be substituted by the Association. It is well for the General Medical Council to keep an eye on anything that may tend to decentralise or weaken, however unwittingly, the effect of existing powers, in which apparently trivial charges may be fraught with grave and far-reaching consequences. In the year 1860 for instance, the Royal College of Physicians of London introduced a short Act to amend the Medical Act of 1858, whereby the letters testimonial and the "elects" were abolished. It is open to question whether the abolition of the "elects," in whom the summary powers of the College were vested as regards quacks and quackery, did or did not at the same time destroy the penal powers of that body. The

amending Act was passed shortly after the creation of the General Medical Council, when it was hardly likely to be experienced enough to weigh the consequences of the proposed change. The College of Physicians, however, apparently consider that their penal powers persist in spite of the abolition of the "elects" in 1860, for it is only last year that they insisted on those rights in opposing the draft charter of the British Medical Association. It is to be hoped that the General Medical Council will take some strong and vigorous steps in the direction of clearing away the fog that surrounds the mazes of medical legislation, and will urge upon Government, through the Privy Council, the necessity of the strengthening and consolidation of existing medical law. In no other way can the interests of the community be properly safeguarded. Nor need we despair of the future as regards the Council. Of late there have been many signs that a new and more liberal spirit is pervading the council chamber of that august body. Resolutions are now considered that were formerly dismissed with a scant plea of *non possumus*. The important point of unqualified medical practice has been taken up, and on every side there are indications that the General Medical Council is about to add to its duties the protection of the public against unqualified medical practitioners, in place of their former policy of drastic discipline confined strictly to duly qualified medical men. The note of confidence in the future development of the Council was conspicuous at the recent meeting of the Direct Representatives of England and Wales with the Metropolitan Practitioners. The medical profession owes a debt of gratitude to their direct representatives, past and present, but it must be remembered that the pressure for reform should come from without, and that such pressure should be strong and persistent in order to bring about various changes of vital importance, both in the constitution and in the policy of the General Medical Council.

#### WORKMEN'S COMPENSATION AND REFUSAL TO SUBMIT TO OPERATION.

THE manufacture of case-law in the Workmen's Compensation Act is going on apace, and it is desirable for medical men to keep in touch with the trend of judicial decisions, in order that they may advise their patients wisely. The question of refusal to submit to operation on the part of an applicant for compensation has cropped up from time to time. It appears that, speaking broadly, the refusal must be "reasonable," that is to say, that there must be little doubt as to the probability of success of surgical interference. There are, of course, other less direct reasons that might be maintained as justification for refusal, such as, for instance, a state of general enfeeblement or of cardiac disease that would render the administration of an anæsthetic more than ordinarily hazardous. In a recent case tried before the Court of Appeal a somewhat important variation of the question of refusal as usually presented was adjudicated upon. The main facts may be gathered from the *Times'* law report, of which the following is a brief summary:—A foreman, named Marshall, claimed com-

pensation from the Orient Steam Navigation Company for injuries sustained in the course of his employment. A burn on the fingers of one hand became septic, and four days after the accident was lanced by the ship's surgeon, who next day suggested several free incisions in the hand itself, but this was declined by the patient. Ultimately the applicant went into hospital, where a finger was amputated. The ship's surgeon gave evidence at the subsequent trial at the County Court of Essex that, in his opinion, if the operation had been performed the finger would have completely recovered. The learned County Court Judge came to the conclusion that the applicant would have perfectly well undergone the operation, and that it was unreasonable for him to refuse to submit to it. His Honour, however, held that, as another doctor who saw the applicant later had given evidence that in his opinion the finger was so implicated that the operation could not have saved it, he could not say whether the operation would have saved the finger or not, and as in fact the finger had been lost, there must be an award in favour of the applicant. The decision was appealed against by the employers. The Master of the Rolls, in dismissing the appeal of the employers, remarked on the difficulties presented by this class of cases, as to which he had been sanguine enough to think that the Court had laid down rules for the guidance of the County Court judges. In the case under consideration, the first question was, whether the man was unreasonable in refusing, the next, whether the loss of the finger was due to his unreasonableness. He referred to a previous judgment of his own in *Warneken v. Moreland* (1909, 1 K.B., 184, at p. 188), which ran: "I do not understand how anyone can doubt that, under the present circumstances, the true inference of fact is that the continuance of the incapacity is not due to the original accident, but is due to this workman's unreasonable refusal to take a step which any reasonable man would willingly submit to." It was an issue of fact in Marshall's case for the County Court to say whether the refusal was reasonable or unreasonable; but that was not enough, he must go further, and say whether the continued disability was due to the accident or to the unwillingness to submit to the operation. The burden of proof that something had happened, the result of which was that the loss of the finger had not been due to the accident; but it was impossible to show that operation would have saved the finger. The appeal was accordingly dismissed.

#### CURRENT TOPICS.

##### Anti-Vivisectionists and Cruelty to Animals.

ONE of the unfortunate results of the so-called anti-vivisectionist movement is that the reputable organisations for the prevention of cruelty to animals are being embroiled and brought into disrepute. No one will deny that the National Society for the Prevention of Cruelty to Animals has done much humane and useful work, and it is to be regretted if its activity is impaired in the future. In some districts, however, trouble is being caused by the violence of the anti-vivisectionists, and local

branches are in danger of disruption. In Dublin, for instance, where the branch has already suffered much from dissension, we understand that at a recent meeting held in private, a bye-law was carried making an anti-vivisectionist pledge a condition of election to the committee. As a result, there is likely to be a secession from the ranks of the subscribers to the Society for the Prevention of Cruelty to Animals, as many who give their cordial support to that organisation have sane views as to the freedom required by research. The result of the anti-vivisectionist revolt is that grave injury is done to the movement to safeguard the comfort of animals.

#### Slum Property in Dublin.

LAST week, during certain repairs to a tenement house in Dublin, the house collapsed and two lives were lost. The evidence given at the inquest on the unfortunate victims disclosed the fact that for the past eight years the attention of the Sanitary Department of the Dublin Corporation had been directed to the condition of the house in question. Since 1901 no less than twenty-six notices had been served on the landlord in respect of this one house, the defects being in some cases structural, in others sanitary. For eight years, therefore, the municipal authorities had been aware of the condition of the premises, and in spite of this it collapsed, killing two men. There is no question that it was within the powers of the Corporation compulsorily to close the premises, but though closing notices were served, they do not seem ever to have been enforced. Apart altogether from the startling end of the incident, the fact that it is possible for a landlord to keep his premises in such a condition as to require twenty-six notices in eight years is a curious commentary on the efficacy of Dublin sanitary methods.

#### Damages for Barber's Rash.

THANKS to modern scientific advances, the infectivity of that most troublesome and disfiguring malady known as "barber's rash" has been established. From that knowledge it follows that the condition is preventable, and, as a necessary further conclusion, that the barber who infects a customer by the use of uncleanly instruments in shaving must be held responsible for the consequences. At the Hull County Court, on November 16th, a local watchmaker sued a barber for £50 damages on account of "barber's itch," caused by being shaved by defendant's lady assistant with insanitary instruments. The facts were proved, and it was admitted that defendant had notices about his shop, "Cleanliness is next to Godliness," "Beware of Dirty Shaves," "Fresh water for Every Customer—One Penny." It was shown, however, that fresh water was not always supplied. The defence fell back upon the two-edged argument that elaborate precautions could not be adopted when there were many customers to be attended to at the same time. With regard to that plea, His Honour remarked that all that was wanted was a decent clean shave, and that seemed possible when the defendant was not too busy. He gave judgment in favour of plaintiff to the extent of £25, and costs. Considering the extent to which barber's rash prevails, and the fact that it is absolutely avoidable by the use of

proper precautions in the sterilisation of instruments and other articles used in shaving, it is a matter of wonder that actions for compensation are not of more frequent occurrence.

#### The Housing Bill.

THE Housing Bill, after dragging its slow length along the floor of Parliament during two Sessions, has at length passed both Houses, and now awaits the Royal Assent. The Government adhere to the position they first took up with regard to county medical officers. It will be obligatory upon all County Councils to appoint officers, and they will be irremovable except with the consent of the Local Government Board. This will somewhat improve the status of medical officers, but will not give them an assured and independent position. As we have over and over again insisted, everything must always depend upon the personal qualities of the local bodies. They may be rendered unable to dismiss an officer, but they can still make his position intolerable to him, or, at least, put such pressure upon him as will reduce him in many cases to complete subordination. The recent treatment of the medical officer by the Council of Kingston—the Surrey county town—was, in this connection, sufficiently suggestive. Neither this new step nor any other provision of the Housing Bill can be productive of much good unless local patriotism becomes much more recognisable than it is at present throughout the country. Less than 50 per cent. of burgesses will take the trouble to record their votes for candidates for local bodies, whilst men of capacity, as a rule, will neither come forward to serve nor to take any part in selecting and supporting them when in office. Illustrations of the comparative failure of sanitary legislation all over the country due to these causes are appearing from week to week in these pages.

#### Supported by Voluntary Contributions.

FROM week to week more or less striking evidence is forthcoming of the failure of the system of voluntary contributions to furnish income sufficient for the maintenance of our hospitals. The Great Northern's difficulties are now being set forth in enormous newspaper advertisements, which must be in themselves consuming a considerable income. The hospital's last annual income was £3,000 short, and it owes the bank over £14,000. Upon this Sir G. C. T. Bartley, who has been examining into the sources of the hospital's funds, offers some pertinent criticism. He finds that the hospital receives virtually no local support. The population it serves numbers 500,000; among them together they subscribe only £480, or about a penny a family per year. This seems a very weak argument for outside help, for which the appeals are being made, seeing that the great bulk of the inhabitants are well-to-do, and support the average number of public houses, besides places of amusement of every class. Sir G. Bartley points out that an average subscription of 1d. a week per family would not only supply the £17,000 required for the upkeep of the hospital, but would give in addition some £4,000 a year for extension. If the subscription lists of other London hospitals are examined, it will be found that the same thing prevails pretty generally. The bulk of

the subscriptions to all hospitals comes from wealthy and benevolent people, upon whom personally the institutions have no claim, and comparatively little is provided by the inhabitants of the locality, who all directly or indirectly participate in the benefits of the hospital. So long as money can be obtained from any source, the present system will no doubt be continued; the alternative of municipal hospitals supported by the rates is not likely to be adopted very willingly.

#### The Declining Birth-Rate.

To the numerous correspondents who have from time to time sustained an animated controversy in our columns with regard to the exact significance of the falling birth-rate, a phenomenon which is now making itself more and more aggressively prominent among the people of these islands, the recently-issued work of Mr. W. C. D. Whetman, F.R.S., may be heartily commended. The book, which is entitled, "The Family and the Nation," is quite up to the high level to which previous scientific writings of the author have reached. There can be no doubt about the diminishing quantity of the population, and there can be no doubt about the effects upon the nation's fate in some directions which must result when the decline becomes absolute. The experiment has been made in France, and has already produced a relative national weakness which is becoming a source of greater and greater anxiety to her statesmen. The question was once more discussed in the Chamber last week during a debate on the Budget, when M. Briand, Prime Minister, and M. Barthou, Minister of Public Works, dwelt upon the enormous importance of the subject. The deaths in France during the first six months of this year have exceeded the births by 28,203. The question of quality is, within certain limits, of more importance than the question of quantity; and if it were certain that a falling birth-rate were necessarily accompanied throughout the mass of the people by production of offspring physically and mentally superior, misgivings for the future might, perhaps, be minimised. The author, however, enlarges upon the fact that there is really being carried on a gigantic system of artificial selection which encourages survival of the unfit. Among the classes of the nation that, in virtue of physical and moral qualities, have valid claim to be styled superior, including skilled artisans, the birth-rate has fallen fully 50 per cent. in forty years, whilst no fall has taken place among the lowest classes—casual labourers and wasters. The problems are worked out so far as possible from the standpoint of evolution in the work to which we refer, and the remedial measures suggested lie in the direction of the national organisation of eugenics—a view which is now adopted by a growing band of scientific sociologists.

#### PERSONAL.

THE KING in Council has been pleased to appoint, among others, Miss E. M. N. Williams, M.D., D.P.H., to be a member of the Senate of the University of Durham.

PRINCESS VICTORIA OF SCHLESWIG-HOLSTEIN presided at the annual meeting of the St. George's Hospital Work Society at St. George's Hospital.

PROFESSOR PRIESTLEY SMITH occupied the chair at the fourth of the special course of lectures at Birmingham Institutions, given under the auspices of the Workers' Educational Association, and delivered at the University, on the 24th ult., by Alderman J. H. Lloyd, upon "The Hospitals of Birmingham."

THE Duchess of Northumberland has sent a full-sized billiard table to the men's wing of the Royal Hospital for Incurables.

DR. J. J. PURSER, Anaesthetist to Dr. Steevens' Hospital, Dublin, has been elected Assistant Physician.

DR. MOON will contest the East Marylebone parliamentary division of London at the next election, in the Liberal interest.

DR. E. MARSHALL is one of the recipients of the King's medal in silver to commemorate the Shackleton Antarctic Expedition, 1907-9.

HER EXCELLENCY THE COUNTESS OF ABERDEEN opened a food and cookery exhibition on November 24th in the Rotunda, Dublin.

DR. T. HOBBS CRAMPTON was presented with an illuminated address, on November 24th, by the Irish Medical Schools' and Graduates' Association.

MRS. SIBYL ANNE TAIT, who died on August 27th, was the widow of Mr. Lawson Tait, F.R.C.S. Her estate is valued at a net personalty of £11,089.

DR. E. HASTINGS TWEEDY, F.R.C.P.I., Master of the Rotunda Hospital, has been elected Gynaecologist and Obstetric Physician to Dr. Steevens' Hospital, Dublin.

PROFESSOR A. CRUM BROWN, F.R.S., who is well known to Edinburgh graduates, was recently presented by his old pupils with his portrait, painted by Mr. A. E. Walton, R.S.A.

MISS HARRIMAN has recently purchased the ferry-boat *Eric*, which she has had transformed into a usefully equipped school for the children who are affected with tuberculosis.

THE new botanical laboratories at University College will be opened on Friday, December 17th, by Dr. D. H. Scott, F.R.S. The Vice-Chancellor (Professor M. J. M. Hill) will preside.

EMERITUS PROFESSOR THOMAS PURDIE has offered to the University of St. Andrew's the sum of £2,000 to provide the salary of an assistant in the Purdie Chemical Research Laboratory.

Mrs. GEORGE H. LODGE, L.R.C.P. and S.Ed., L.D.S., R.C.S.S., formerly Mayor, now Deputy Mayor of the borough of Rotherham, has been added to the Commission of the Peace for that borough.

ON the occasion of his jubilee as a medical practitioner, Dr. James Whiteford, Greenock, was recently entertained to dinner by the Faculty, and presented with a cheque for £100 and a silver salver.

SIR FREDERICK TREVES, BART., F.R.C.S., G.C.V.O., has been appointed a Director of the Clerical, Medical, and General Life Assurance Society, in the place of Sir Thomas Smith, Bart., F.R.C.S., deceased.

THE Honorary Membership of the Italian Society of Obstetrics and Gynaecology has been conferred on Dr. H. Macnaughton-Jones, President of the Obstetrical and Gynaecological Section of the Royal Society of Medicine, formerly University Professor of Obstetrics and Gynaecology in the Queen's University,

THE decision of Sir John Batty-Tuke, M.P., to retire from Parliament at the next election will create a vacancy in the Unionist candidature for the representation of the Edinburgh and St. Andrew's Universities. Sir John's services to the medical profession have been many and valuable, and his retirement will be a great loss to that body, in whose interest he has always been an ardent and able defender.



# A CLINICAL LECTURE ON APPENDICITIS WHEN THE VERMIFORM APPENDIX IS A PELVIC ORGAN.

By JOHN BLAND-SUTTON, F.R.C.S. Eng.,

Surgeon to the Middlesex Hospital.

ALTHOUGH it is well known that the vermiform appendix is often a pelvic organ, this common variation in its position has not received adequate recognition from the clinical standpoint at the hands of the family physician, the surgeon, or the gynaecologist. From the patient's point of view it is of some importance.

Anatomical observations teach us that the tip of the vermiform appendix may occupy any position in the abdomen from the region of the gall-bladder to the floor of the pelvis, in which situation it may, and often does, rest on the rectum. When an appendix lying in relation with the gall-bladder perforates, it will cause symptoms which are very similar to those produced by perforation of a septic gall-bladder, the duodenum, or the stomach, especially in the pyloric region.

When an appendix lying behind the cæcum sloughs, the symptoms simulate those of a perinephric abscess. Before 1886 many post-cæcal appendix-abscesses were regarded and treated as perinephric abscesses, or as empyemata.

When the appendix hangs in the pelvis it is as liable to inflame and to slough as in any other situation; if the patient be a man it often causes puzzling symptoms, but if the patient be a woman the nature of the disease is often overlooked, even when an operation is performed.

In the days when acute appendicitis was not so readily appreciated as it now is, many believed this morbid condition to be uncommon in women. In 1900 I published some observations to show that appendicitis in its most acute form often occurred in women, but its effects were usually attributed to lesions of the internal reproductive organs, especially pyosalpinx. An acute appendicitis when the tip of the vermiform appendix is free in the pelvis simulates, not only pelvic cellulitis and abscess, tubal pregnancy, and pyosalpinx, but it will set up salpingitis and ovaritis.

Let me mention two striking cases illustrating this: (1) A nurse, æt. 30, came under my care, with a tumour on the right side of the pelvis as big as a cricket ball. She was very ill, and some who saw her suspected that the lump might be malignant. Coeliotomy was performed, and I succeeded in enucleating a rounded semi-solid mass from the right broad ligament which proved to be the ovary infiltrated with pus. After removing this lump I looked into the pelvis and saw a thing sticking up exactly like the toadstool known as the dog-stinkhorn (*mutinus caninus*). This happened to be the vermiform appendix, as thick as my forefinger. When the ovary and appendix were investigated in the laboratory, a pure culture of streptococcus was obtained from each. We satisfied ourselves that the trouble arose in the appendix, then perforation occurred and the infection spread to the ovary. This organ proved to be tuberculous, for giant-cell systems were found in it, but we failed to find tubercle bacilli.

(2) This is more remarkable. A spinster, æt. 30, was suddenly seized with acute pain in the pelvis, followed next day by a profuse vaginal discharge. The pulse became rapid, the temperature rose to 103° F. A rounded, tender swelling could be easily felt on vaginal examination in the right half of the pelvis. The physical signs and symptoms pointed strongly to a pyosalpinx. The conditions under which the patient lived were not in favour of the common cause of acute pyosalpinx, and her general condition did not support the idea of an acute tuberculous salpingitis. An operation was advised and carried out: the Fallopian

tube was as thick as a thumb, and the vermiform appendix adhered by its terminal segment to the cœlomic ostium of the tube. With the exercise of a little care, I succeeded in removing the appendix, tube and ovary without disturbing their relation to each other. When these parts had been carefully hardened, I was able to demonstrate that the tip of the vermiform appendix had adhered to the mouth of the Fallopian tube, and that part of the appendix which was in relation with the tubal ostium had become perforated by ulceration, the infective fluid passing directly into the lumen of the tube causing acute salpingitis. As I have already mentioned, the symptoms and clinical signs in this patient were those set up by a leaking pyosalpinx.

The leading signs of acute appendicitis may be summarised thus:—Severe pain of sudden onset in the right iliac fossa, followed by acceleration in the pulse rate, and an increased temperature, which may amount to 103° or even 105° F., accompanied by great tenderness and an ill-defined swelling over the painful area, and the absence of rigors. When these signs are present, there is little fear of the nature of the condition being overlooked, certainly not by the doctor, and as the disease is so prevalent, especially in the inhabitants of large cities, the patients often recognise the disease without medical aid.

In cases of acute appendicitis, when the appendix lies in the cavity of the pelvis, there will be sudden pain followed by high temperature, and, as a rule, an acceleration of the pulse. The pain and tenderness will be localised to the hypogastrium, and the usual tumidity in the iliac fossa is absent. Such conditions are often attributed to other causes than appendicitis, and the "diagnostic doubts" will vary according to whether the patient is male or female. The least complicated of these cases arise in males. The following case will serve as an illustration, and indicate the great danger such patients run when the signs are mis-read.

(3) A man of middle age was admitted into a medical ward on account of severe and sudden abdominal pain. The patient appeared to be gravely ill, with rapid pulse, temperature 101° F., and the abdomen flat, but rigid. The hypogastric region was tender to the least pressure. The physicians were puzzled. They recognised that there was some grave lesion in the abdomen, but were uncertain of its nature and situation. Moreover, they could not make up their minds in regard to surgical intervention, and invited me to guide them. I recognised that the man was in all probability suffering from perforation of a pelvic appendix, and, acting on this opinion, I opened the abdomen by a median sub-umbilical incision, evacuated the pus, and removed a sloughing pelvic appendix. The patient left for a convalescent home in 21 days. This is by no means an uncommon case.

(4) A priest, æt. 39, had been ill three weeks on account of pain in the hypogastric region, accompanied by fever, painful defæcation, and frequent micturition. On rectal examination I could feel an indefinite hardness on the right side of the rectum, and came to the conclusion that he had a sub-acute appendicitis connected with a pelvic appendix. On opening the abdomen in the middle line, access to the pelvis was retarded by adherent coils of small intestines. These were carefully unravelled, and the vermiform appendix was discovered on the floor of the pelvis, lying between the rectum and the bladder, surrounded by a coil of ileum, and embedded in caseous pus. It required some care to avoid injuring the ileum

during the process of separating the adhesions. The appendix was removed, and drainage resorted to for a week. The patient made an excellent recovery. It was thought that the tubercle bacillus might be the cause of the trouble, but we failed to find it.

In some instances it is possible to diagnose acute appendicitis when the appendix occupies the pelvis, even in women.

(5) Dr. Guy Hollings asked me to see a girl, æt. 17, on account of sudden pelvic pain followed by the usual signs of a perforated viscus. He came to the conclusion that the cause of the trouble was perforation of an appendix lying in the pelvis, for, on a rectal examination, an indefinite tender mass could be felt involving the rectal wall on the right side of the pelvis. The condition was explained to the parents, and 16 hours after the onset of acute symptoms the abdomen was opened through a median sub-umbilical incision, and a sloughing vermiform appendix was found and removed, with good consequence to the patient. On three occasions Dr. Guy Hollings has detected acute appendicitis in a pelvic appendix, and in each case I have proved his diagnosis to be correct in the course of an operation, and all the patients recovered.

The intimate relation which exists between the tip of the vermiform appendix and the rectum, when the former hangs in the pelvis, explains one mode by which the disease tends to spontaneous cure. The following is not an uncommon taunt hurled by conservative physicians at radical surgeons: Tell us what happened to patients with acute appendicitis in the days antecedent to its surgical treatment? So far as the patients with a pelvic appendix are concerned, the answer is not difficult. When the wall of the appendix sloughs, a small quantity of highly infective fluid escapes into the cavity of the true pelvis; this fluid contains pathogenic micro-organisms, usually the common colon bacillus or the virulent streptococcus. In response to this irritation, the pelvic peritoneum exudes lymph very freely, and in the course of a few hours three or four ounces of thin, purulent, and often foetid fluid accumulates in the pelvis. It is important to appreciate this. I am an ardent advocate for resorting to surgical measures as soon as it is fairly certain that a patient has a perforated appendix, and it frequently happens that the physician in charge of the case will often express astonishment that so much pus could form in the course of a few hours after the signs of perforation had declared themselves.

When this purulent fluid forms abundantly, it will float up the small intestines and the adjacent omentum so that they form a roof to this collection of fluid, and for a time isolate it from the general peritoneal cavity. If the infecting micro-organism is of moderate virulence, the patient exhibits signs of a pelvic abscess, and in the course of a few days the purulent material will erode a hole into the wall of the rectum and escape through the anus. In some instances it will find a way out through the wall of the bladder or the vagina. In my early days as a surgeon I have assisted the pus to escape through the walls of the rectum by a timely thrust with a scalpel.

In cases where the pus does not escape from the pelvis through hollow viscera, it will accumulate and completely fill the pelvic cavity, and then slowly make its way along the serous surface of the ascending or the descending colon and fill one or both loins. In this event it may be diagnosed as a peri-nephritic abscess. At this stage the disease has become sub-acute, but pus continues to accumulate, and reaches the region of the diaphragm, and now stands a chance of being detected as a subphrenic abscess, or causing a difference of opinion among those in charge as to whether the patient is suffering from a subphrenic abscess or an empyema. In a few rare instances pus and gas from an acute appendix abscess arising in the pelvis have passed upwards along the course of the left colon, perforated the diaphragm, involved the lung, and been expectorated. In a remarkable case of this kind, recorded by Barnard, a man expectorated pus and gas on several occasions, and finally recovered (Fig. 1). It is known for certain that the primary source of the pus was a perforated pelvic appendix, because in the early stage of the disease the abdomen was opened by a median incision, and an attempt made to drain the pelvic abscess, and this

enabled the surgeon to determine the position of the vermiform appendix.

I have long since satisfied myself that many of the cases in which an appendix perforates, and the pus infects the peritoneal cavity and destroys the patient's life in three or four days, the appendix either occupies the pelvis or lies on its brim. I am not unmindful of

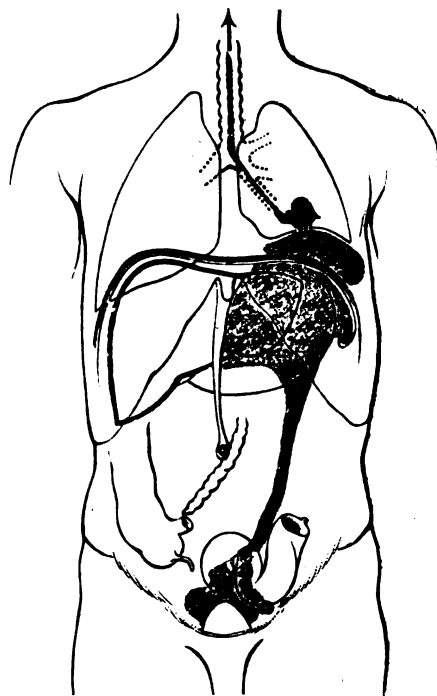


FIG. 1.—A diagram to show the route of pus from an appendix abscess in the pelvis to the trachea (after Barnard).

the fact that such disastrous consequences depend on the nature of the micro-organism in the pus, and such rapidly fatal infections occur with the common colon bacillus as well as with the *streptococcus*.

Great difficulty in diagnosis is often caused by an appendix which lies on the brim of the pelvis, with its terminal half-inch dipping into the pelvic cavity. In such a case an inflamed or perforated appendix will cause a local swelling nearer the middle line than usual, and this will stimulate very closely a distended and inflamed Fallopian tube. On the other hand, an inflamed tube and ovary lying near the pelvic brim in an unmarried woman are very likely to be diagnosed as an inflamed appendix. The relation of the right Fallopian tube to the appendix is more intimate than many believe who have not closely studied this matter, and it is quite a common mistake for surgeons who, as a rule, are not well-informed in pelvic gynaecological conditions, to mistake the signs set up by the bursting or abortion of an early tubal gestation for an attack of appendicitis.

My attention was drawn to this matter some years ago in a forcible manner. I was asked to see a young unmarried lady on account of what was regarded as an attack of acute appendicitis. I had to confess that the symptoms were such as to make me believe that the patient was suffering from acute salpingitis, although the domestic surroundings were against such an opinion. When the parts were exposed in the course of the operation, the right tube, ovary, and appendix were mixed up in the pelvis as to make it doubtful which organ was the primary offender. I removed all three, and, after operation, on gently squeezing the tube, I saw suspicious-looking pus exude from the cœlomic ostium. On examining the vulva, similar pus existed in abundance. I wrapped the excised ovary, tube and appendix in a sterilised drape, and immediately conveyed them to Mr. Foulerton, who

not only identified the gonococcus in the pus, but succeeded in cultivating it.

On two or three occasions I have removed the right ovary, Fallopian tube, and vermiform appendix, which occupied an abscess in the pelvis, and found it difficult to decide whether the Fallopian tube or the appendix was the organ primarily concerned.

When dealing with cases in which there is doubt whether the source of the suppuration is the appendix or the Fallopian tube, I am sure it is a wise course to open in the middle line, for this route gives free access to each of these organs, and provides the most direct route for drainage. The most ineffective measure of dealing with an appendix abscess in the true pelvis, is an attempt to drain it through an incision in the right flank. On several occasions I have had women placed under my care with persistent sinuses left after the evacuation of a supposed appendix abscess. In dealing with them by means of a median sub-umbilical incision, I have found the sinus to lead into the sac of a pyosalpinx, and found the vermiform appendix normal. In one extraordinary case a girl had a supposed appendix abscess evacuated by a lateral incision; a persistent sinus and a faecal fistula were the sequelæ, and she remained a bedridden invalid for two years and six months. She came under my care, and, on opening the abdomen and inspecting the parts, I found a healthy appendix, but bilateral pyosalpinx. In order to remedy the conditions existing in the pelvis, I found it necessary to remove both tubes and ovary, as well as resect four inches of the sigmoid flexure and twelve inches of ileum. The cut ends in each instance were joined by a circular enterorrhaphy, and with success.

It has been my practice for several years in all cases suspected to be acute appendicitis, with absence of swelling in the right iliac fossa, to open the abdomen by means of the median sub-umbilical incision. I always deal with these conditions without delay, and remove the appendix if it be the source of trouble. In an ordinary lateral operation for acute perforative appendicitis, if I have any reason for believing that pus has found its way into the pelvis, I make a small median incision and introduce a drainage tube reaching to the floor of the pelvis, and I believe that many lives have been saved by this plan. I cautiously remove the fluid exudate with gauze, but never flush out the pelvis with water, and avoid introducing any kind of chemical re-agent.

In order to afford some idea of the frequency with which appendicitis occurs in connection with a pelvic appendix, I have had the cases occurring in my practice from January 1st to July 1st, 1909, a period of six months examined with the following result:—

The operation for the removal of the appendix was performed on 57 occasions. There were 14 cases of acute appendicitis. Among these were 8 instances in which the vermiform appendix occupied the pelvis, and was removed through a median incision. In some of the patients in which the appendix was removed in the quiescent stage through a lateral incision the organ occupied the pelvis.

Thus, from a careful consideration of the matter, I have come to the conclusion, founded on a study of my own cases, that the vermiform appendix probably occupies the pelvis in about 20 per cent. of patients who suffer from appendicitis.

The advantage of the median sub-umbilical incision when the appendix occupies the pelvis is obvious, for it affords direct access to the troublesome organ.

In bringing these remarks to a conclusion, I would like to add that there is much difference of opinion among surgeons as to the propriety of removing a vermiform appendix when acutely inflamed. I hold a very strong opinion on this matter. If my vermiform appendix inflames, I will have it removed within twelve hours, and I carry out these principles in my practice.

NOTE.—A Clinical Lecture by a well-known teacher appears in each number of this journal. The lecture for next week will be by Professor A. Mathieu, M.D., Physician to the Paris Hospitals. Subject: "The Symptoms of Intestinal Stenosis."

## ORIGINAL PAPERS.

### NOTES ON AN APPARATUS FOR THE ADMINISTRATION OF ETHER BY THE PURELY OPEN METHOD.

By DR. R. H. HODGSON.

MR. PRESIDENT AND GENTLEMEN,—By your kind permission I have the pleasure of showing you an apparatus which I believe is as effective as it is simple in the administration of ether by the open method, by which I mean, that the patient is anæsthetised by ether and air without breathing a second time, the same air or ether. For I feel that the disfavour in which ether anæsthesia is held by many is almost wholly due to the want of recognition of the objectionable re-breathing. There can be little doubt but that patients who are anæsthetised by the closed, or partially-closed, methods are more or less poisoned by their own breath, and that the deaths attributed to ether should be, in reality, assigned to auto-genetic narcotic poisoning, which arrests the circulation in the capillaries of the lungs, whereas ether stimulates that circulation. We take great care that our ether shall be pure, yet, when we give it by any other method than the absolutely open method, we mix it with most irrespirable gases. In support of this opinion, I may point out that with the strictly open method I experienced none of the causes for anxiety inseparable from the administration of ether by the closed, or partially-closed, method, such as bronchitis, pleurisy, nephritis, etc., nor was there any struggling or excitement whilst going under or coming to. Ether, given in this manner, seems to me to be free from danger, no matter what the patient's condition, and, furthermore, by making ether the vehicle, I have been able to give by inhalation, the following drugs:—Camphor, hexamethylene tetramin, carbolic acid, red iodide of mercury, iodide of arsenic, formalin, hamamelis, creosote, perchloride of mercury, guaiacol and iodine, the fumes from many of which are ordinarily most deadly for inhalation purposes, but which may be inhaled with impunity through an apparatus such as I now show. Thus it will be seen that pulmonary tuberculosis may be directly attacked by almost any drugs in the very seat of its origin, and it is, therefore, only reasonable to conclude that with the help of the anæsthetist pulmonary tuberculosis may be arrested and destroyed with great certainty. Although I have, so far, limited the value of inhalation to the cure of tubercle of the lung, I do not mean that the treatment is useless in tubercle of other parts of the body, but that the lungs afford the most convenient evidence of its benefits. I have, with this apparatus, administered ether alone, or mixed with other drugs, in extreme cases of pulmonary phthisis with cavity and without, in general tuberculosis, in tubercle of the lung and kidney, in tubercular pleurisy and in advanced organic heart disease with dilatation and impending death. In all cases rapid improvement has followed, and no danger has been apparent. Consumptives taking ether in this way show rapid alleviation of their symptoms, the expectoration is reduced in quantity in a few hours, the cough is lessened, the temperature lowered, the sweats reduced in number and severity, the appetite marvellously improved, the desire for and assimilation of fatty foods correspondingly increased and the area of dulness perceptibly diminished. Another great advantage of treating pulmonary phthisis through the medium of ether inhalation is that it

(a) Read before the Section of Anæsthetics, Royal Society of Medicine, Nov. 5th, 1909.

leaves the healthy parts of the lungs in a state of hypertrophic compensation without producing emphysema. The fact that I have administered ether by itself, or in conjunction with other drugs, by this apparatus on upwards of 450 occasions leads me to think that in bringing this method before you I am not only showing a useful instrument, but am opening up a large field of work for anæsthetists, whereby pulmonary consumption can be rapidly and effectually dealt with and anæsthetists become the lung operators of the day, and their instruments will be made for the finest tempered drugs. The apparatus, though simple, has the following advantages over any other that I have seen:—All the air breathed must first pass through the drugs—no second breathing of the same air can take place. The quantity of ether necessary for a long operation is small—2 or 3 ounces. Freezing of the ether may partially take place in exceptional circumstances. The patient feels but little sensation of suffocation.

There is practically no struggling going under or coming-to, and no fear of hæmorrhage.

The lungs and bronchial tubes are not choked by viscid mucus.

The after-complications of ether administration do not arise.

There are no sponges or other media liable to become foul or to accelerate freezing.

The enormously increased power of assimilation of fatty foods and the rapid relief of congestion of the lungs by those subjected to ether suggests the treatment in cases of diseases of the pancreas and in pneumonia.

## TUBERCLE OF THE LACRYMAL SAC. (a)

By SYDNEY STEPHENSON, M.B., C.M.

NOT so very long ago, well within my own memory, tubercle was believed to account for few affections of the eye. Tubercle of the choroid and of the conjunctiva were, it is true, recognised, but both were held to be extremely rare.

The more refined our means become of diagnosing tubercle, the more frequent do we find it to be associated with, and the probable cause of, many affections of the eye. Indeed, it is no exaggeration to claim that no anatomical structure of the eye, with the single exception of the crystalline lens, may not upon occasion be affected by tuberculosis.

In my experience, lacrymal disease, more especially lacrymal abscess, is in children over a year old nearly always due to either tubercle or syphilis. The little girl I now introduce to your notice is suffering from tuberculosis of the lacrymal sac, still sometimes spoken of as though it were a very rare condition. As a matter of fact, although few such cases have been reported, yet I am satisfied that amongst children the condition is far from rare. The affection, in my experience, is often primary, a point in which it resembles tubercle of the conjunctiva, and differs from tubercle of the choroid. The history of the present case is, briefly, as follows:—

Jessie Lovell, æt. 10, first seen on September 9th, 1909, on account of a swelling at the inner corner of the left eye, believed by her friends to have resulted from the bite of a mosquito some six weeks previously. The evidence upon which this statement was based would not stand a minute's critical examination. A reddish and somewhat tender swelling, with two or three tiny holes in its

anterior surface, lay over the region of the lacrymal sac below the inner canthus of the left eye. The lump was situated below the tendo oculi, but a rounded swelling, evidently the distended fundus of the lacrymal sac, could be felt above that structure, and when pressure was exercised upon the sac, muco-pus passed through the fistulæ in the skin. The conjunctiva, ocular and palpebral, was free from changes, tuberculous or otherwise. There were nebulæ of each cornea, evidently the result of a former attack of eczematous (phlyctenular) keratitis. The left preauricular gland was palpable, and the glands on the left side of the neck were a little enlarged. In particular, a small hard, tender swelling could be made out in the thickness of the left cheek, and doubtless represented one of the groups of small glands in that region to which attention was first directed by Poncet, of Lyons.

For the rest, the child was said to have lost a little flesh lately, but no physical signs could be made out in the chest, the abdomen, or elsewhere. Phthisis was denied as regards the family.

The appearance and the indolence of the swelling made me suspect tuberculosis, and the modification of the cutaneous tuberculin test, as recently recommended by Lautier ("Répertoire de Pharmacie," February, 1909) was accordingly tried. A piece of wool, moistened with a few drops of tuberculin and covered with an impermeable dressing, was bound upon the skin of one arm. No reaction followed the application. Von Pirquet's scarification was then tried, and a positive result was obtained in forty-eight hours.

The present condition (after the disease has lasted for some two and a half months) is as follows:—A reddish swelling, the size and shape of a coffee bean, lies over the left lacrymal sac, and is obviously connected with the latter. The skin is affected, and on pressing over the fundus of the lacrymal sac above the tendo oculi, muco-pus escapes through two or three tiny fistulæ in the swelling. Slight glandular enlargement on the left side of the neck. General health good.

### DIAGNOSIS.

We have gone some way in the direction of diagnosis when we recognise that such an affection as tubercle of the lacrymal sac exists. The tuberculous nature of a lacrymal affection may be inferred from the family history and co-existing signs of tuberculosis. A sign of value is an indolent enlargement of one or more of the glands contained within the thickness of the cheek, first described by Poncet, of Lyons. There are three groups of these small glands: (1) Supra-mandibular; (2) buccinator; (3) superior maxillary. The group last-named is the one usually enlarged in tuberculosis of the lacrymal sac. It is described by Trendelenburg (THE MEDICAL PRESS AND CIRCULAR, February 3rd, 1904) as "consisting in glands included in the naso-labial fold on a level with the lower border of the orbit at the internal palpebral angle." The adenitis rarely exceeds the size of a pea. The preauricular gland usually participates, and so do the submental and neighbouring glands. In one of my cases tubercle of the lacrymal sac (confirmed bacteriologically) was associated with massive enlargement of the corresponding preauricular gland and at a later stage of the cervical glands.

The tuberculous nature of a lacrymal affection can be demonstrated by the discovery of the tubercle bacillus in discharge from or scrapings from the affected sac. It is a very tedious business, and, indeed, it is often impossible to discover the micro-organisms in the discharge, although upon occasion I have succeeded in doing so. On the other

(a) Remarks based upon a Clinical Demonstration given at the Polyclinic, London, W.C., on October 8th, 1909.

hand, it is much simpler to examine scrapings from the interior of the diseased sac. It is a good plan to wash the scrapings with several lots of distilled water, so as to free them from blood, and then to select a suitable morsel, cut it across with fine scissors, and to smear the freshly-cut surface over several cover-slips. By these means I succeeded in demonstrating tubercle bacilli in the sac from a lad, æt. 9, who had had enlarged glands removed from his neck, and who presented coincident ulceration, believed to be tuberculous, of his nasal chambers. The case was reported in the "Reports of the Society for the Study of Disease in Children," Vol. V., 1905, p. 184.

The presence of tubercle elsewhere, supposing the sac mischief to be secondary, or in the sac itself, supposing the mischief to be primary, can be demonstrated by Calmette's ophthalmo-reaction, Moro's inunction, Von Pirquet's cutaneous test, or one of the other methods nowadays in current use. If the evidence of tubercle is strong, and yet no reaction follow the use of one or other of these tests, a second application should be made, or the method be changed, for example, from the Lautier skin application, as in the present case, to the Von Pirquet inoculation.

The local condition of the sac and overlying parts often affords presumptive evidence in favour of a tuberculous character. Indeed, as in the present case, its very appearance is suggestive of tuberculous lesions in other parts of the body. It is apt to show one or several fistulæ, and to feel not only thickened, but also "lumpy," as though it contained so many polypi, and such may actually be found after the surgical removal of the diseased sac. Persistence in an almost unchanged form for months together is also a characteristic of the cases,

#### TREATMENT.

If possible, the patient should be sent to the country or seaside; life in the open air should be insisted on, and cod-liver oil should be given internally. A remedy that is well worth trying in these cases is bismuth paste, compounded in accordance with E. G. Beck's formula (*Zeits. f. Chirurgie*, 1908, No. 18), which is as follows:—Bismuth subnitrate, 30; white vaseline, 60; soft paraffin, 5; and wax, 5. A small quantity of this compound should be injected into the lacrymal sac two or three times a week through one of the fistulæ that are usually present, or through the lower punctum lacrymale, previously dilated for the purpose. The bismuth paste should also be kept constantly applied to the affected part by means of a dressing. Another excellent application is iodoform emulsion.

If a change to the seaside or country be impossible, as it often is in poor London children, and the condition shows no signs of improvement under the measures described above, it is best to excise the lacrymal sac and any affected skin. The operation is by no means so simple as might appear, since the disease has not infrequently spread beyond the sac and caused more or less extensive adhesions to neighbouring parts. Quite an extensive dissection may then be required. Any serious difficulty in closing the wound, after removal of the sac, may be met by transplanting a piece of skin and subcutaneous tissue from some other part of the patient's body.

THE report of Dr. F. St. George Mivart to the Local Government Board on the General Sanitary Circumstances and Administration of the Borough of King's Lynn, has just been published, and can be purchased through any bookseller or from the Government publishers.

## HYPERTROPHIC CIRRHOSIS AND ALCOHOLIC PARALYSIS.

By H. C. DRURY, F.R.C.P.I.,

AND

A. C. O'SULLIVAN, F.R.C.P.I.

A—B—, was a large, stout woman, æt. 42. She had had 20 pregnancies, with 13 living children and seven mishaps, these latter having been irregularly distributed between the live births. There was no history or evidence of syphilis. She was admitted to hospital in a state of alcoholism, and there was a history of alcoholic habits. She complained of weakness and feeling of "pins and needles" in the feet and hands. There were abrasions on both knees from "her legs having given under her" on getting out of bed. Her mind was quite clear. The lungs were healthy. The heart-sounds were strong and regular, but there was a mitral systolic murmur; there was not, however, any evidence of failing compensation of the heart. Her temperature was 101° F.

On examining the limbs it was found that she could move the arms and hands well and extend the hand back to the full, but this power was found to be decidedly weak and the extension was overcome by very little force. The muscles of the arms, particularly the extensors, were painful to pressure. Similarly, she could flex the foot, but this movement was also weak; the muscles of the back of the legs were very painful to pressure, and any attempt to flex the foot caused great pain in the calf muscles. No reflexes could be obtained. Sensation was present, but various abnormal sensations were complained of. It was evident she was in an early stage of peripheral neuritis. This gradually developed from day to day till there resulted complete drop-wrist and drop-foot—she could draw the legs up in bed but could not extend them again.

The abdomen was of very large size and pendulous. At the umbilicus was a tumour about the size of a hen's egg which was the empty thickened sac of a long-standing umbilical hernia. The liver was greatly enlarged. There was also considerable enlargement of the spleen. There was no ascites. Jaundice was present, the conjunctiva being of a bright yellow colour, but the colouration of the skin was so slight that it might easily escape notice. The urine was high coloured, clear, without albumin or sugar, faintly alkaline to litmus paper, and a drop of acetic acid brought down a cloud of urates; it gave the iodine reaction for bile—the green colour being readily obtained and distinct, though not deep. The fæces were lighter than normal, but contained bile colouring matter and were not china-clay like.

The liver was very large, reaching in the parasternal line more than two handbreadths below the lower border of the ribs; this was not due to displacement downward, as the upper limit of liver dulness was at the normal level. The liver could be readily made out by palpation without percussion, and felt smooth on the surface, retained the normal shape of the organ and was very firm, the margin feeling sharp and hard. It was painless.

Simple hypertrophy was excluded by the great size of the organ, the jaundice and the absence of usual concomitants. Simple fatty liver was excluded by the extreme firmness of the organ and the remarkable sharpness of the edge, and also the liver was larger than one was likely to find in simple fatty liver. Amyloid liver was excluded by the absence of any cause for such, as there was no sign of there having been old-standing suppuration or syphilis, and the history of the pregnancies was alone sufficient to exclude this.

while, though the spleen was enlarged, there was no evidence of renal amyloid disease. The painless condition, great enlargement and absence of cardiac symptoms excluded congestion. All the symptoms and signs, however, supported the diagnosis that was made of hypertrophic or biliary cirrhosis, with the accidental accompaniment of alcoholic neuritis.

As the days passed the jaundice did not materially increase. She had continuous, but quite irregular febrile temperature for a time. After five days (10th October); she suddenly got profuse diarrhoea without any assignable cause, the only medicine she was taking being small tonic doses of quinine, which was immediately stopped. The diarrhoea continued uncontrolled, in spite of opium, for seven days, and then stopped, apparently under the influence of lead and opium pill. This attack of diarrhoea caused a great change in her condition. She became rapidly and alarmingly weak, and fell into a heavy lethargic or semi-comatose condition, but complained greatly of sleeplessness and a condition like nightmare. The sleeplessness did not yield to hypnotics. The heart-sounds became so weak that the murmur, which was at first loud, could not be heard.

The temperature fell to sub-normal, more a collapse temperature than a normal afebrile condition. With the increasing neuritis she became quite helpless, and so gradually sank lower, till she died rather suddenly on the 24th October.

The great enlargement of the liver having the characters already described, with enlarged spleen, with jaundice and without ascites; the irregular febrile temperature, profuse diarrhoea, bile-coloured faeces, great asthenia passing into semi-coma and death produce the clinical picture described by Hanot, which has been named Hypertrophic, or Biliary, or Insular Cirrhosis of the Liver.

#### **PATHOLOGICAL REPORT**

BY

A. C. O'SULLIVAN, F.R.C.P.I.

Liver weighed 7 lbs. 11 ozs. The increase in size was fairly uniform in both lobes, but was much greater antero-posteriorly than from side to side. Capsule somewhat thickened, finely granular on surface—light greenish yellow in colour. On section the connective tissue was seen to divide the liver up into small areas about as big as, or smaller than, a lobule under microscope. There was a great quantity of connective tissue arranged on the whole, with a tendency to surround lobules. It also sent delicate strands everywhere in between the liver cells. There was extensive fatty infiltration, and the liver was stained green in places with bile pigment. The connective tissue outside the lobules contained great quantities of newly-formed bile ducts.

The external cutaneous nerve showed an extensive degeneration, all the larger fibres being degenerated, myelin and axis cylinders broken up, and the nuclei of the sheath increased.

## **OPERATING THEATRES.**

### **ST. THOMAS HOSPITAL.**

**TWO RENAL CASES.**—MR. BATTLE operated on two renal cases, in both of which the symptoms had been rather severe, and in which it was difficult to make an exact diagnosis without the aid of the X-rays. The first was that of a woman, æt. about 30, who had suffered for some years from pain in the left side of the abdomen and back, which pain had occasionally been very severe, and accompanied by dark-coloured urine, apparently from the presence of blood in it. In

this case the pain, from the patient's description, had resembled very closely the pain of renal colic, but as the kidneys were movable on both sides, it was thought advisable to have an X-ray examination and ascertain whether a stone was present or not. Dr. Greg reported that nothing abnormal could be ascertained on examination with the X-rays; it was therefore concluded that this was a case of movable kidney with crises. At the operation the usual oblique incision was made in the left lumbar region, the kidney isolated from its bed and brought on to the loin. No stone could be felt either before or after the viscus had been brought up, but the central part of the convex border was softer than natural and depressed compared with the other parts of the kidney. It was evident that in this part there was a condition of partial hydronephrosis. The kidney was replaced in its normal position and the wound closed, without drainage. It had been considered, Mr. Battle said, that the kidney would contract adhesions in its bed, which would hold it firmly in position in the same manner as we see following a similar procedure in other cases of movable kidney.

The second case was that of a boy, æt. about 15, who had suffered from attacks of renal colic, with the passage of blood at intervals of about two years. Nothing abnormal could be found on examination of the kidney region, although there was a trace of blood in the urine. In this case, Dr. Greg reported that there was a shadow in the kidney, which he considered was caused by a small calculus. The usual incision was made to expose the kidney, and it was examined in front and behind with the finger, but it did not present any abnormality. When brought up on to the loin its appearance was that of a healthy kidney, but no stone could be felt. An incision was therefore made in the convex border, and the finger introduced into the pelvis. In one of the calices of the lower part a stone could be detected; this was removed. It was a flat, dark-coloured stone, shaped very much like a terminal phalanx of a finger. It was thin, like a flake of necrosed bone in appearance, but at the angles of its base, whitish oxalate crystals were clustered. The amount of bleeding from the incision into the kidney was very slight, and easily arrested by catgut sutures, which were passed transversely across the kidney substance at intervals of about half-an-inch. The kidney was replaced in its bed; a small drainage tube placed in the posterior part of the wound, and the wound closed with sutures placed in the lumbar fascia over the muscles and skin.

Mr. Battle considered that these cases showed the great utility of the X-rays in diagnosis of renal calculus. Although the stone in the second case was a small one, it threw a distinct shadow, and his experience was that when such a shadow was detected by this means a stone was present, but when there was no shadow there was no stone. Many cases of movable kidney had attacks of pain "crises," in which there was renal colic almost indistinguishable from similar attacks produced by stone. Operation proved the absence of stone, but frequently a hydronephrosis was discovered of a partial nature. Cure almost invariably followed operation, for the kidney contracted firm adhesions which prevented its falling again into the position which had produced that kinking of the ureter on which the attacks of pain depended. As a rule, attacks such as those met with in the first case quickly subsided, when the patient laid down for a time, but sometimes they were more persistent, and their occurrence made it necessary to operate, as, without relief, life was sometimes rendered rather a burden. In addition, the partial intermitting hydronephrosis might develop into a permanent general hydronephrosis, and the kidney be deprived of all usefulness.

In their efforts to advance the knowledge of child life, the Child-Study Society have secured the aid of Professor Karl Pearson, of University College, London, who has drafted a schedule for studying the factors that influence the social life of the child.



**SPECIAL REPORTS.****GENERAL MEDICAL COUNCIL.****NINETIETH SESSION.**

FIRST DAY.—TUESDAY, NOVEMBER 23RD, 1909.

The President, SIR DONALD MACALISTER, in the Chair.

DR. JOHN DIXON MANN, whose appointment as the representative of the Victoria University of Manchester was read to the Council on May 28th, 1909, was introduced by Dr. Caton.

The official notification of the appointment of Sir Christopher Nixon, Bart., M.D., LL.D., as representative of the National University of Ireland for a period of three years from November 11th, 1909, was read.

Sir Christopher Nixon was introduced by Sir Thomas Myles.

The PRESIDENT delivered the following address:—  
Gentlemen, His Majesty the King in Council has been graciously pleased to approve and give effect to the representations which, on May 25th, you directed to be made, and which I duly communicated to the Privy Council. An Order has accordingly been issued, which confers on the registered practitioners resident in England and Wales the power, at the next general election, of returning an additional member to this Council. Thus in about two years' time the directly elected representatives of the practitioners of England and Wales will number four, instead of three, as at present. Our respectful acknowledgments are due to the Privy Council for their good offices in commending our request to His Majesty's favourable consideration. After a few congratulatory words with reference to the baronetries conferred on Sir Henry Morris and Sir Dyce Duckworth, the President said the tragic death of Mr. Sydney G. Lushington, in the prime of his active powers, has deprived the Council of an adviser by whose legal skill and practical wisdom it has constantly profited during the past five years. Session by session Mr. Lushington gained an ever surer place in our esteem, not only for his professional but for his personal qualities. To his friends, and to the members of this Council which he served so well, his untimely death brings more than regret for the interruption of a distinguished career; it brings also a sense of sorrow as for a personal loss. As it was necessary to instruct Counsel to advise us with reference to certain penal cases, and to act as Assessor at inquiries to be held during the present Session, I consulted Mr. Muir Mackenzie and our solicitor, Mr. Winterbotham, on the subject. By their advice Mr. A. H. Bodkin has been requested to give us his assistance during this week. Mr. Bodkin is familiar with the procedure of the Council, and he holds a public legal appointment under the Attorney-General, similar to that previously held by Mr. Muir Mackenzie and Mr. Lushington. Before the end of this meeting I shall take occasion to ascertain your wishes as to future arrangements in this respect.

Another distinguished man, who for ten years was honourably associated with the Council as the direct representative from Ireland, has passed away during the present month. Sir William Thomson, C.B., had won a prominent place among his brethren for his manifold services to the profession and to the State. Those who sat with him in this chamber will long cherish the memory of his impressive bearing and his helpful interest in the Council's work. On your behalf I have sent a letter of condolence to Lady Thomson and her family.

We have to welcome, as a new member, Dr. John Dixon Mann, whom the Victoria University of Manchester sends to the Council in the place of Professor Young. He will find that his fame as a medical jurist has preceded him, and that the Council reckons with confidence on his ability to assist in dealing with the questions, partly medical, partly juridical, which come before it. He will find also that the associations left by Professor Young are of so happy a character that it is already a recommendation to be his successor.

We receive back Sir Christopher Nixon in a new guise, but with the old cordiality. In May he sat as the member for the Royal University of Ireland, of which he was Vice-Chancellor. The Royal University expired a few days ago, and with it his membership. But the National University of Ireland and the Queen's University of Belfast have now arisen in its stead. Sir Christopher returns with undiminished lustre as member for the National University, in which he is both Professor of Medicine and Vice-Chancellor.

Under recent Acts of Parliament the Queen's University of Belfast, and the University of Bristol, have each acquired the right to appoint a member of the Council. The Registrar has not yet received intimation that the appointments have actually been made.

The movement for the application to the Province of the Dominion of Canada of Part II. of the Medical Act, 1886, initiated in Nova Scotia and Quebec, continues to make progress. The Province of Prince Edward Island has now petitioned His Majesty in Council that the benefit of medical recognition, on reciprocal terms, may be extended to it. Negotiations on the question are proceeding, and as the Provincial law appears to afford due facilities for the local registration of all practitioners registered in the United Kingdom, it may be expected that a satisfactory agreement will speedily be reached.

A recent alteration in the Provincial law of Quebec appears to the Executive Committee to have the effect of limiting, in a manner which was not contemplated during the original negotiations, the recognition in Quebec of qualifications that are registrable in this country. As the question raised concerns in the first instance the Privy Council rather than the Medical Council, the attention of the Lord President has been called to it, and I have reason to believe that inquiries will be made through the proper official channels. We shall no doubt be informed of the result in due course.

The Committee appointed to consider various proposals for legislation on the subject of Anæsthetics were informed officially that no progress was likely to be made with these proposals during the present Session of Parliament. I therefore refrained from summoning the Committee to meet during the recess; but a meeting will be held during the present week, and a report on the subject will be prepared for your consideration. Meanwhile I was asked, as your President, to appear before a Departmental Committee, appointed by the Home Secretary, and give evidence regarding the action taken by this Council to promote the practical study of Anæsthetics by candidates for medical qualifications. I did so on November 19th, and laid before the Committee the relevant extracts from your minutes. The Chairman of the Committee expressed the desire that any further resolutions on the question, which the Council may adopt during the present Session, might be communicated to him.

The objections taken last May by the Council, on legal grounds, to certain provisions in the proposed draft charter of the British Medical Association, were communicated to the Lord President of the Privy Council for his information. There is reason to believe that our criticisms, and those offered by various other bodies, have been brought by His Lordship to the notice of the Association. It is probable that an amended draft, in which account is taken of these criticisms, will in due course be substituted by the Association for the original proposal.

The report of the Education Committee on the distribution of the medical students' time, as between the several parts of the curriculum, will in accordance with your resolution be discussed to-day. Its terms have been long before the Council, and have no doubt been carefully considered by members individually. It is to be hoped that the Council is now ready to discuss and to decide upon the important and yet simple proposals it contains for the improvement of medical education, more especially in regard to the branches of knowledge on which professional competence mainly depends.

The Pharmacopœia Committee held a two days' meeting last month, for the consideration of the suggestions for the revision of the Pharmacopœia.

made by the several medical authorities with respect in particular to the omission or inclusion of specified drugs and preparations. With the assistance of the Secretary, Dr. Tirard, the Committee were able to arrive at provisional conclusions in a large number of instances. These will form the basis for further inquiry, and at a later stage will come up for definite settlement. Meanwhile the Committee of Reference in Pharmacy continues its labours for the improvement, from a pharmaceutical point of view, of the several monographs in the present issue of the *Pharmacopœia*.

The November Session is understood to be set apart especially for disciplinary inquiries. Owing, perhaps, to the more systematic notification by the civil authorities of offences and convictions in which professional men are concerned, we have on this occasion a considerable number of such cases to deal with. Some of these are of a novel character, and will call for your special attention. But all have been patiently studied by the Penal Cases Committee, with the help of our Legal Adviser, and in the light of the documentary evidence submitted. In every instance the Committee has satisfied itself that there is a case which, *prima facie*, calls for an answer, and it has accordingly authorised the institution of an inquiry by the Council, before which alone the case and the answer can be fully stated and supported by oral or other testimony.

The question whether it is practicable in medical cases, as it is in dental cases, to delegate such inquiries, so far as the facts are concerned, to any body of members short of the full Council, has been occupying the attention of the Executive Committee. But in view of certain difficulties, as yet unsurmounted, the Committee are not at present prepared to offer definite proposals for your consideration. In so important a matter it is necessary that the statutory responsibilities of the Council should first be fully ascertained and discharged. Even serious considerations of convenience and economy cannot be allowed to outweigh considerations of legal obligation, should these prove to be in conflict. Personally, I express the hope that the Executive Committee may discover some way by which they may be reconciled.

Moved by Dr. LITTLE, seconded by Sir HUGH BEEVOR, and carried by acclamation: "That the President be thanked for his address, and requested to let it be printed in the minutes."

Moved by Dr. NORMAN MOORE, seconded by Sir HENRY MORRIS, and agreed to: "That the Council do adjourn at 4.30 p.m. to-day, to enable certain Committees to meet for the completion of their reports."

Moved by Dr. MCVALE, seconded by Sir JOHN MOORE, and agreed to: "That the table showing results of competition held in July, 1909, for Commissions in the Indian Medical Service, be received and entered on the minutes."

Moved by Dr. MCVALE, seconded by Sir JOHN MOORE, and agreed to: "That the thanks of the Council be conveyed to the Under-Secretary of State for India for the return which he has again furnished to the Council, with the request that such returns may in the future continue to be furnished to the General Medical Council."

Strangers having been re-admitted after the Council had considered certain matters *in camera* the President announced that the General Council had directed the Registrar to restore to the Dentists' Register the name of William MacGregor Veitch.

The Council resumed the adjourned consideration of the Education Committee's report on various proposals submitted to them referring to the curriculum in medicine, pursuant to the resolution of the General Council of June 1st, 1909, viz., that this business be taken on the first day of the November Session.

Moved by Dr. MACKAY, seconded by Sir CHRISTOPHER NIXON: "That the recommendation in the report of the Education Committee be adopted, viz.: That the following be added to the recommendations of the Council in regard to professional education:—For the purposes of this recommendation the subjects of the curriculum are arranged in two groups, the earlier group comprising the Preliminary Sciences and Anatomy and Physiology, the later group embracing

all the remaining subjects, exclusive of Pharmacy. The regulations of the bodies should be so framed as to secure (1) for the study of the subjects of the later group the reservation of a period equivalent in value to 2½ academic years (27 months) of undivided study, half-time value being allowed for periods of work in which studies in the earlier and later groups overlap; and (2) the reservation of a period of 2 academic years (24 months), in which the studies of the later group shall have the undivided attention of the student."

The CHAIRMAN of the Education Committee, Dr. MACKAY, dealt with the report in an interesting speech. A discussion followed, in which Sir John Fraser, Sir Hugh Beevor, Drs. Latimer, Finlay, and Norman Moore, Sir C. Ball, Sir T. Myles, Sir John Moore, Drs. F. Taylor, Saundby, and Kidd, Sir Henry Morris, Dr. Little, and Sir Christopher Nixon took part, the principal points under discussion being the time between the qualifying examination and the anatomical and physiological examination, also the system of blocking, taking up examinations piecemeal, and the preliminary course.

As the time had arrived for adjournment, it was moved by Dr. NORMAN WALKER, seconded by Sir CHRISTOPHER NIXON, and agreed to: "That the debate on the motion be now adjourned to a date to be fixed by the Business Committee."

The Council then adjourned.

SECOND DAY.—WEDNESDAY, NOVEMBER 24TH, 1909.

The President, SIR DONALD MACALISTER, in the Chair.

The minutes of the last meeting were taken as read and confirmed.

The Council proceeded to the consideration of the facts proved against Mr. William John Watson in regard to whom the Dental Committee, at its meeting on Monday, November 22nd, 1909, drew up a supplementary report.

The case was considered by the Dental Committee on May 25th, 1908, was further considered by the Committee on November 23rd, 1908, and was further considered by the Committee on May 24th, 1909.

At the close of the proceedings on May 28th, 1909, the President, addressing Mr. Watson, said:—

"Mr. Watson: The Council has again given careful consideration to the two reports of the Dental Committee, and has deferred the further consideration of your case to November next, when you will be required to be present in person, and to produce satisfactory evidence, and not merely a personal statement, as to your professional good conduct in the interval, with particular reference to your undertaking to discontinue all advertising, or connection, direct or indirect, with those who are advertising."

The President informed the Council that the Dental Committee had dispensed with the attendance of Mr. Watson from the present proceedings. He further stated that the other parties in the case did not desire to be heard in the further report.

The further report having been read, the Council deliberated on the case *in camera*. On strangers being re-admitted, the President announced that the Council had not directed the Registrar to erase from the Dentists' Register the name of William John Watson.

The Council proceeded to the consideration of the facts proved against Charles Morgan in regard to whom the Dental Committee, at its meeting on Monday, November 22nd, 1909, drew up a supplementary report.

At the close of the proceedings on May 28th, 1909, the President, addressing Mr. Morgan, said:—

"Mr. Morgan: The Council has again given careful consideration to the reports of the Dental Committee, and has deferred the further consideration of your case to November next, when you will be required to be present and to offer satisfactory evidence, other than your own statement, as to your professional good conduct in the interval, with particular reference to your promise to discontinue the issue, direct or indirect, of all advertisements."

The President informed the Council that the Dental

Committee had dispensed with the attendance of Mr. Morgan from the present proceedings. He further stated that the other parties to the case did not desire to be heard on the further report.

The further report having been read, the Council deliberated on the case *in camera*.

On strangers being re-admitted, the President announced that the Council had *not* directed the Registrar to erase from the Dentists' Register the name of Charles Morgan.

The Council considered the facts proved in the case of Thomas Torrens McKendry, registered as of 39, Wellwood Road, Goodmayes, Ilford, Essex, M.B., Bac. Surg., 1894, R. Univ. Irel., who had been summoned to appear before the Council at 2 p.m. on the following charge as formulated by the Council's solicitor:—

"That you have knowingly and wilfully on various occasions, and in particular on the 20th day of February, 1909, assisted one E. C. Dalby, a person not registered as a dentist, in carrying on practice as a dentist by administering anæsthetics on his behalf to persons coming to him for treatment, and that in relation thereto you have been guilty of infamous conduct in a professional respect."

The complainant was Mr. Victor Albert Chatelain.

At the close of the proceedings on Wednesday, May 28th, 1909, the President, addressing Mr. McKendry, said:—

"Mr. McKendry: The Council has postponed judgment till the November session, when you will be required to attend in person and to produce evidence, more particularly from medical colleagues in your neighbourhood, as to your professional good conduct generally in the interval, and in particular that you have not repeated the offence of which complaint has been made."

Mr. McKendry indicated in answer to his notice; he was not accompanied by counsel or solicitor.

Mr. Chatelain, the complainant, was not present, but the Council's solicitor read a letter from him, stating that he had no further evidence to tender to the Council.

Mr. McKendry tendered himself as a witness on his own behalf, and put in three testimonials as to character from medical practitioners, viz., from Mr. A. J. Pattison and Mr. H. W. Garden, of Goodmayes, and Dr. T. R. Atkinson, of Chadwell Heath. He also answered questions put to him by the Council's solicitor, and undertook not to administer anæsthetics for unregistered persons in the future.

After the Council had deliberated on the case *in camera*, Mr. McKendry and strangers having been re-admitted, the President announced the decision of the Council as follows:—

"Mr. McKendry: The Council have taken into consideration the evidence which you have produced, and does *not* see fit to direct the Registrar to erase your name from the Medical Register."

The Council considered the case of Robert Wiseman Cunningham, registered as of King's Island, Tasmania, M.B., Mast. Surg., 1895, M.D., 1904, Univ. Edin., who had been summoned to appear before the Council on the following charge as formulated by the Council's solicitor:—

"That you abused your position as a medical man by committing adultery and eloping with Alice Mary Wigram, whose husband you had been attending professionally and while you were the medical attendant of the family, of which adultery you were found guilty by the decree of the Probate, Divorce, and Admiralty Division (Divorce) of the High Court of Justice, dated June 11th, 1909, in the case of Wigram *v.* Wigram and Cunningham, in which you were the co-respondent, and that in relation thereto you have been guilty of infamous conduct in a professional respect."

Mr. Cunningham did not attend in answer to his notice, nor was he represented by counsel or solicitor.

The Council's solicitor read the notice, and, in the absence of a prosecutor, opened the case. He read the evidence given at the Divorce Court. He also read a letter which had been sent by Mr. Cunningham in answer to his notice.

Strangers then withdrew, by direction from the chair, in order that the Council might deliberate on the case *in camera*.

On strangers being re-admitted, the President announced the judgment of the Council as follows:—

"I have to announce that the Council have judged Robert Wiseman Cunningham to have been guilty of infamous conduct in a professional respect, and have directed the Registrar to erase from the Medical Register the name of Robert Wiseman Cunningham."

The Council resumed the consideration of the Education Committee's report on various proposals submitted to them referring to the curriculum in medicine.

After a discussion, in which Drs. Norman Walker and Finlay, Sir Clifford Allbutt (who made an admirable and sensible speech), the President, Sir Henry Morris, and Dr. Saundby took part, it was moved by Dr. NORMAN MOORE, seconded by Dr. SAUNDBY, and agreed to:—

"That the debate be adjourned to a convenient opportunity."

The Council considered the case of John L'Estrange McGrane, registered as of Killucan House, Killucan, Westmeath, Lic. R. Coll. Surg. Irel., 1884, Lic. K.Q. Coll. Phys. Irel., 1885, who has been summoned to appear before the Council on the following charge as formulated by the Council's solicitor:—

"That, while holding the appointment of ship's surgeon on the s.s. *Trafford Hall* on her voyage beginning at Liverpool on June 22nd, 1909, and ending at Birkenhead, Liverpool, on September 18th, 1909, you were repeatedly drunk and incapable of performing the duties which as a registered medical practitioner you had undertaken to perform, and that on various occasions you were fined in respect of such dereliction under the regulations in force on the ship for maintaining discipline and were too drunk for the entries to be read over to you. And that in relation thereto you have been guilty of infamous conduct in a professional respect."

The original information upon which this charge is based was laid before the Council by the Board of Trade.

Mr. McGrane attended in answer to his notice, accompanied by Mr. George Wallace, his counsel, instructed by Mr. Reginald Hingston, his solicitor.

The Council's solicitor read the notice, and in the absence of any complainant, proceeded to open the case. He read a statutory declaration of Mr. Frederick Henry Southern, in the employment of the managers of the Hall Line of steamers, and extracts from the official log of the s.s. *Trafford Hall*.

He then called Mr. John Carey, from the office of the Registrar of Shipping, as a witness, and examined him. Mr. Carey also answered questions put to him by the Legal Assessor. He was cross-examined by Mr. Wallace.

Mr. Wallace then opened the case for the defence. He called Mr. Arthur D. O. C. Finegan, a registered medical practitioner, of Mullingar, as a witness, and examined him. Mr. Finegan was cross-examined by the Council's solicitor, and answered questions put to him by the Legal Assessor and by the Chair. He was re-examined by Mr. Wallace.

Mr. Wallace then called Mr. McGrane as a witness on his own behalf, and examined him. Mr. McGrane answered questions put to him by the Council's solicitor and by the Legal Assessor. He also answered questions put to him by the Chair and by members of the Council through the Chair. He was re-examined by Mr. Wallace.

Mr. Wallace called Mrs. McGrane, and examined her as a witness.

Mr. Wallace then addressed the Council on behalf of Mr. McGrane, and the solicitor addressed the Council in reply.

The Council then deliberated on the case *in camera*.

Mr. McGrane and strangers having been re-admitted, the President announced the judgment of the Council as follows:—

"Mr. John L'Estrange McGrane, I have to announce that the Council have come to the following decision in your case, viz., that the facts alleged

against you in the notice have *not* been proved to the satisfaction of the Council."

The Council proceeded to the consideration of the case of Alexander Riddle Stower, registered as of 80 Shaftesbury Avenue, London, W., "in practice before July 22nd, 1878."

The complainants were the British Dental Association.

The complaint, having been referred to the Dental Committee to ascertain the facts, the Dental Committee reported as follows:—

On November 23rd, 1909, the inquiry was held.

The said Alexander Riddle Stower attended personally, and was represented by Mr. Cannot, instructed by Mr. Angiers, solicitor.

The British Dental Association, the complainants, appeared by counsel, Mr. Hart, instructed by Messrs. Bowman and Curtis-Hayward, solicitors.

The Committee find that the following facts were established by the evidence:—

The said Alexander Riddle Stower was registered in the Dentists' Register on July 19th, 1879, as "in practice before July 22nd, 1878," and his address in the Register for the current year is 80, Shaftesbury Avenue, London, W.

The said Alexander Riddle Stower has advertised his professional practice:—

(a) By advertisements carried by two sandwich men parading Oxford Street.

(b) By the issue and circulation of leaflets and a calendar adorned with a female portrait, and

(c) By advertisements in the public newspapers describing himself as "Stower's Dental Association," and asking for agents.

(d) By various conspicuous notices on the front of 80 Shaftesbury Avenue, where he carries on his profession, consisting of notices in six windows, a swinging sign at the entrance, a show-case illuminated with electric lights, and other notices both outside and inside the premises.

These advertisements and leaflets are of a highly objectionable character.

The said Alexander Riddle Stower stated that some of the advertisements complained of had been withdrawn, and that it was not his intention to employ sandwich men or to advertise in the newspapers in future.

Mr. Stower now attended in answer to his notice, accompanied by Mr. E. H. Cannot, his counsel, instructed by Mr. C. A. Angier, his solicitor.

The British Dental Association, the complainants, were represented by Mr. Hart, counsel, instructed by Messrs. Bowman and Curtis-Hayward, their solicitors.

The report having been read, Mr. Cannot addressed the Council on behalf of his client. Mr. Hart addressed the Council in reply.

The Council then deliberated on the report *in camera*.

Mr. Stower and strangers having been re-admitted, the President announced the judgment of the Council as follows:—

"Alexander Riddle Stower: I have to inform you that on the facts proved in the report of the Dental Committee, it has been held that you have been guilty of infamous or disgraceful conduct in a professional respect, and that the Registrar be directed to erase from the Dentists' Register the name of Alexander Riddle Stower."

The Council then adjourned.

### THIRD DAY.—THURSDAY, NOVEMBER 25TH, 1909.

The President, SIR DONALD MACALISTER, in the Chair.

THE minutes of the last meeting were taken as read and confirmed.

The Council proceeded to the consideration of the case of Frederick Morrish Pierce, registered as Mem. R. Coll. Surg. Eng. 1867, Lic. Soc. Apoth. Lond. 1867, Lic. R. Coll. Phys. Lond. 1868, M.D., Q. Univ. Irel. 1868, now of 50 Gordon Square, W.C., who had been summoned to appear before the Council on the following charge as formulated by the Council's soli-

citor:—"That, being a certifying surgeon appointed by the Secretary of State under the Factory and Workshop Act, 1901, you, for the purpose of evading the conditions under which you were appointed, which required the personal fulfilment of the duties prescribed by the Act (except under the circumstances and on the conditions laid down in the instructions issued by the Secretary of State), knowingly and wilfully employed another registered medical practitioner (viz., Edward Arthur Burgess) to perform your duties; and that in order to carry out this system of evasion you committed the following offences, viz.:—

"(a) It being your duty as such certifying surgeon to examine young persons under 16 and children for certificates of fitness for employment in factories and workshops and to grant certificates in suitable cases, you allowed the said Edward Arthur Burgess to conduct the examination for you and to sign your name to certificates that you had personally examined certain persons on certain dates named, and that they were fit to perform the work on which they were engaged.

"(b) It being your duty as such certifying surgeon to investigate and report upon certain accidents, you allowed the said Edward Arthur Burgess to visit the works and the injured persons for you, and you thereafter signed certificates that you had personally investigated the causes of such accidents and had personally taken the evidence of such injured persons, when, in fact, you had made no such personal investigation and had not personally taken such evidence, but the certificates were subsequently filled up by you upon information furnished to you by the said Edward Arthur Burgess.

"(c) It being your duty as such certifying surgeon personally to examine and certify persons employed in certain dangerous processes, you allowed the said Edward Arthur Burgess to examine such persons on your behalf and to insert the necessary particulars in the Health Register, which you afterwards signed; and in other cases you signed the said Register in advance, the necessary particulars being afterwards filled in by the said Edward Arthur Burgess when he visited on your behalf.

"And that in relation thereto you have been guilty of infamous conduct in a professional respect."

The original information on which this charge was based was laid before the Council by the Home Office.

Dr. Pierce did not attend in answer to his notice, but was represented by Mr. Thomas Penson Griffiths, of Messrs. Chester, Broome, and Griffiths, 36 Bedford Row, London, W.C., his solicitor.

Mr. Griffiths stated that Dr. Pierce was too unwell to appear before the Council, and read a medical certificate to that effect from Mr. John Galley Blackley, M.B., M.R.C.S., of 29 Devonshire Place, London, W., dated November 24th, 1909, and a telegram, dated November 25th, 1909, to the same effect.

The Council's solicitor read the notice, and, in the absence of a complainant, opened the case, and referred to certain entries in the Health Register of Messrs. Charles Macintosh and Co., Limited, Manchester; in a register of persons, under 16 years of age, certified fit for employment by Messrs. Bannerman; and in reports as to injured persons. He also referred to letters written by Dr. Pierce. He then called Dr. B. Arthur Whitelegge, C.B., H.M. Chief Inspector of Factories, and examined him as a witness. Dr. Whitelegge was cross-examined by Mr. Griffiths, and answered questions put to him by the Legal Assessor. He was re-examined by the solicitor, and answered further questions by Mr. Griffiths and the Legal Assessor; he also answered questions put to him, through the Chair, by members of the Council.

The Council's solicitor then called Mr. James Edward Ashworth, H.M. Inspector of Factories in charge of the Manchester district, and examined him as a witness. Mr. Ashworth was cross-examined by Mr. Griffiths, and answered questions put to him by the Legal Assessor and by the Chair.

The Council's solicitor called Mr. Edward Arthur Burgess, L.S.A., M.R.C.S., and examined him regarding his declaration and the correspondence exhibited thereto. Mr. Burgess was cross-examined by Mr.

Griffiths, and also answered questions put to him from the Chair.

Mr. Griffiths put in a statement by Dr. Pierce in answer to the notice, which he read. He then addressed the Council on behalf of Dr. Pierce.

The Council's solicitor addressed the Council in reply.

After the Council had deliberated on the case *in camera*, strangers having been re-admitted, the President announced the judgment of the Council as follows:—

"Mr. Griffiths: I have to announce that the Council have judged Frederick Morrish Pierce to have been guilty of infamous conduct in a professional respect, and have directed the Registrar to erase from the Medical Register the name of Frederick Morrish Pierce."

The Council next considered the case of Robert Orr, registered as of Ceres, Fifeshire, M.B., Bac. Surg., 1901, Univ. Glasg., who had been summoned to appear before the Council on the following charge as formulated by the Council's solicitor:—

"That you were, on October 1st, 1907, convicted at the Sheriff Court of Fife at Cupar of the following offence, namely, of assaulting a constable of the Fifeshire Constabulary, while engaged in the execution of his duty. And that you were on July 6th, 1909, convicted of the following offence, namely, of breach of the peace and of assaulting James Arthur, Helen White or Arthur, Catherine Dempsey or Kerr, and Catherine Quin."

Mr. Orr attended in answer to his notice; he was not attended by counsel or solicitor.

The solicitor read the notice and the two certificates of conviction.

Mr. Orr then addressed the Council on his own behalf. He did not tender any witnesses.

After the Council had deliberated on the case *in camera*, strangers having been re-admitted, the President announced the decision of the Council as follows:—

"Mr. Orr: The Council have given careful consideration to the question of your convictions and the circumstances connected therewith, and have decided to postpone judgment thereon till the May Session, when you will be required to be present, and it will be in your interest to produce on that occasion testimony from persons of position in your own neighbourhood as to your character and conduct in the interval."

The Council then adjourned.

#### FOURTH DAY.—FRIDAY, NOVEMBER 26TH, 1909.

The President, SIR DONALD MACALISTER, in the Chair.

THE minutes of the last meeting were taken as read and confirmed.

The Council resumed the adjourned discussion on the Education Committee's report.

The discussion was carried on by Mr. Hodsdon, Prof. Thomson, Drs. Knox, Taylor, Latimer, McVail, McManus, Adye-Curran, Caton and Mann, the general feeling being against any further lengthening of the curriculum.

Dr. MACKAY then responded, and, with the consent of his seconder, withdrew his motion and obtained leave to substitute the following: "That the regulations should be so framed as to ensure that the study of the Final Group of subjects should extend over not less than two and a half academic years after the passing of the examination in Anatomy and Physiology has been passed."

An amendment was moved by Sir HENRY MORRIS, seconded by Dr. NORMAN MOORE: "That the regulations should be so framed as to ensure that the study of the Final Group of subjects should extend over not less than two years after the passing of the examination in Anatomy and Physiology has been passed."

The amendment was carried, and, being put as a substantive motion, was also carried.

Moved by Dr. MACKAY, seconded by Dr. NORMAN WALKER, and carried: "That the two years in the preceding motion be defined as twenty-four months."

Sir Henry Morris sought leave to move a resolution which had not been placed upon the programme of business. Leave was accorded. Moved by Sir HENRY MORRIS, seconded by Dr. LANGLEY BROWNE, and carried: "That it be referred to the Education Committee to consider further the place in the student's career which the preliminary sciences should occupy, and that the Committee be requested to frame and submit to the Council a pattern scheme of medical education whereby the required minimum of the several subjects to be included in the curriculum can be adequately studied and the requisite examination thereon passed, by the average student, within the period prescribed by the curriculum."

For, 17; against, 5; 10 did not vote; absent, 2.

Strangers then, by direction from the Chair, withdrew in order that the Council might receive *in camera* a report from the Executive Committee with regard to penal procedure.

The Council next proceeded to the consideration of the case of Charles Frederick Dillon Shaw-Mackenzie, registered as c/o Messrs. Duncan and Duncan, solicitors, Dingwall, M.B., Mast. Surg. 1885, Univ. Edin., who had been summoned to appear before the Council on the following charge as formulated by the Council's solicitor: "That you were, on February 8th, 1909, convicted of the following misdemeanour at the Petty Sessions at Whitby, in the County of York, namely, of being unlawfully guilty, while drunk, of disorderly behaviour at Ruswarp. And that you were, on January 25th, 1909, convicted of the following misdemeanour at the Petty Sessions at Wigton, in the County of Cumberland, namely, of being drunk and incapable in Eden Street, Silloth."

Mr. Shaw-Mackenzie was called, but did not answer to his notice, nor was he represented by counsel or solicitor.

The Council's solicitor read the notice and two certificates of conviction. In the absence of Mr. Shaw-Mackenzie, the solicitor read letters from him dated respectively June 5th, 1909, in answer to a request for an explanation, and November 22nd, 1909, in answer to his notice.

The Council deliberated on the case *in camera*. Strangers having been re-admitted, the President announced the decision of the Council as follows: "We have to announce that the Council has found that Mr. Charles Frederick Dillon Shaw-Mackenzie has been found to have been convicted of the misdemeanours alleged against him in the notice of inquiry, and that the Council have decided to postpone judgment thereon till the May Session, when he will be required to be present, and to produce on that occasion testimony from persons of position as to his character and conduct in the interval."

The Council considered the case of William Shaw, registered as of Larne, Co. Antrim, Lic. R. Coll. Phys. Edin. 1886, Lic. R. Coll. Surg. Edin. 1886, who had been summoned to appear before the Council on the following charge as formulated by the Council's solicitor: "That you were convicted on March 24th, 1909, and again on March 23rd, 1909, at the Larne Town Court of being found drunk in a public street, and on August 24th, 1909, at Larne Petty Sessions of the following misdemeanour, namely, of being found on licensed premises in contravention of the provisions of the Licensing Acts."

Mr. Shaw did not answer to his notice, nor was he represented by counsel or solicitor.

The Council's solicitor read the notice and the certificates of conviction. He also stated that notice had been received of a further conviction and a summons against Mr. Shaw, judgment in which had been postponed. The solicitor read letters which Mr. Shaw had written in answer to the request for an explanation, and in answer to his notice. A medical certificate from Samuel W. Hill, M.B., B.Ch., a further letter from Mr. Shaw dated November 20th, 1909, and a letter from Mr. John Campbell, M.A., M.D., F.R.C.S., asking that the Council would postpone action till the May Session, was also made.

The Council deliberated on the case *in camera*. Strangers having been re-admitted, the President announced the judgment of the Council as follows:

"I have to announce that William Shaw, having been proved to have been convicted of divers misdemeanours alleged against him in the notice of inquiry, the Registrar has been directed to erase his name from the Medical Register."

The Council considered the case of Harry Robert Emms, registered as of 132 Winson Green Road, Birmingham, Mem. R. Coll. Surg. Eng. 1896, Lic. R. Coll. Phys. Lond. 1896, who had been summoned to appear before the Council on the following charge as formulated by the Council's solicitor: "That you were, on June 16th, 1909, convicted at the Cambridge Borough Police Court of having, on May 29th, 1909, feloniously stolen a bicycle belonging to one Debendra Mohan Bose, and on June 7th, 1909, of having feloniously stolen a New Chesterton bicycle belonging to one Alfred Conway, and a Standard Triumph bicycle belonging to one Thomas James Mudd."

Mr. Emms was called, but did not answer to his notice, nor was he represented by counsel or solicitor.

The Council's solicitor read the notice and the certificate of conviction. There was no communication from Mr. Emms.

After the Council had deliberated on the case *in camera*, strangers having been re-admitted, the President announced the judgment of the Council as follows:—

"I have to announce that Harry Robert Emms, having been proved to have been convicted of the felony alleged against him in the notice of inquiry, the Registrar has been directed to erase his name from the Medical Register."

The Council considered the case of James Alexander Pettigrew, registered as of 11 Lowther Street, Whitehaven, Cumberland, "in practice before July 22nd, 1878," in regard to which the Dental Committee had found the following facts established by the evidence:—

That on January 4th, 1909, the said James Alexander Pettigrew was convicted at the Lancaster Quarter Sessions of unlawfully and wilfully neglecting certain children under the age of 16 years in a manner likely to cause them unnecessary suffering and injury to their health, and was sentenced to six months' imprisonment with hard labour.

Mr. Pettigrew did not answer to his notice, nor was he represented by counsel or solicitor.

After the report of the Dental Committee had been read, the Council deliberated on the case *in camera*. Strangers having been re-admitted, the President announced the judgment of the Council as follows:—

"I have to announce that James Alexander Pettigrew having been proved to have been convicted of the misdemeanours alleged against him, the Registrar has been directed to erase from the Dentists' Register the name of James Alexander Pettigrew."

Moved by Dr. SAUNDBY, seconded by Mr. HODSDON, and agreed to: "That the question of allowing candidates to enter for each of the subjects separately of the final examination in medicine, surgery, and midwifery be remitted to the Examination Committee for consideration and report."

Moved by Dr. McVAIL, seconded by Sir JOHN MOORE, and agreed to: "That the report of the Examination Committee on the returns as to examinations for the Services received since the last Session of the Council be received and entered in the minutes."

Moved by Dr. McVAIL, seconded by Dr. SAUNDBY, and agreed to: "That the report from the Examination Committee on the Final Examination of the Apothecaries' Hall, Dublin, held in January, 1909, be received and entered in the minutes."

Moved by Dr. McVAIL, seconded by Dr. SAUNDBY: "That the report from the Examination Committee on the Final Examination of the Apothecaries' Hall, Dublin, held in April, 1909, be received and entered in the minutes."

The following amendment was then moved by Dr. ADYE-CURRAN, and seconded by Dr. McMANUS: "That the report of the Final Examination of the Apothecaries' Hall of Ireland be further postponed till the May Session in order that the remarks of the body concerned may be added."

The debate on the amendment was adjourned. The Council then adjourned.

FIFTH DAY.—SATURDAY, NOVEMBER 27TH, 1909.

The President, SIR DONALD MACALISTER, in the Chair.

The Council resumed the consideration, adjourned from the previous day, of the reception of the report from the Examination Committee on the Final Examination of the Apothecaries' Hall, Dublin, in April, 1909, on which Dr. Adye-Curran had moved an amendment. It was agreed, when proposed by Dr. ADYE-CURRAN, seconded by Dr. LATIMER, that the correspondence from the Apothecaries' Hall, Dublin, should appear as an appendix to the report of the Examination Committee.

Dr. McVAIL, seconded by Dr. NORMAN WALKER, proposed that the report be adopted. After Dr. Adye-Curran had made some further remarks, Dr. McVail's motion that the report be adopted was carried: 19 for, 4 against, 4 did not vote, 7 absent.

The Council then considered the report of the Education Committee, with reference to an application from the Apothecaries' Hall, Dublin, regarding the recognition of its preliminary examination. The Committee had passed the following resolution: "That the application be refused, and that for the reasons the applicants be referred to the decision of the Council as reported in the minutes for 1894 and for 1903."

Dr. MACKAY, seconded by Mr. HODSDON, moved that the report be received, entered on the minutes and approved. Dr. Adye-Curran made some remarks in defence of the application, and, after a few explanatory words from the President, Dr. Mackay's motion was put and carried: 27 for, 1 against, 6 absent.

Mr. TOMES, seconded by Dr. KNOX, moved that the report of the Dental Education and Examination Committee be received, entered on the minutes and adopted. The report referred to an application from Mr. H. M. McNeill for dental registration, which had been made in January, 1909, on the ground that he possessed the L.D.S. diploma of New Zealand and the D.D.S. of the University of Toronto. As neither of these certificates has hitherto been recognised as entitling their possessor to registration, the application was refused. Mr. McNeill had appealed to the Privy Council. The present report was very long, and the Dental Education and Examination Committee went *in extenso* into their reasons for recommending the Council to reply to the Privy Council that in connection with this case they do not consider that the possession of the diplomas tendered affords "a sufficient guarantee of the possession of the requisite knowledge and skill for the efficient practice of dentistry or dental surgery." The motion was carried.

Moved by Sir JOHN MOORE, seconded by Dr. BARRS, and agreed to, that the report of the Pharmacopœia Committee be received and entered on the minutes. The report had reference to improvements in the British Pharmacopœia and to the incorporation in it of the Indian and Colonial addendum.

The report of the Students' Registration Committee was received, and is to be entered on the minutes.

Moved by the PRESIDENT, seconded by Sir C. BALL, and agreed to, that the report of the Anæsthetics Committee be received and entered on the minutes. With regard to the adoption of the report, the President put all the conclusions one by one to the Council; they were all agreed to.

The Council adopted the recommendation of the English Branch Council for the registration of Mr. Alfred Alexander Donald McCabe-Dallas, who had been entitled to be registered under the Medical Act (1858), but who had neglected to effect such registration until after the "appointed day" (June 30th, 1887) under the Medical Act (1886).

Dr. NORMAN moved a vote of thanks to the President. This was carried by acclamation.

By request of the President, strangers then withdrew in order that the Council might deliberate *in camera*, before rising.



## TRANSACTIONS OF SOCIETIES.

## NORTH OF ENGLAND OBSTETRICAL AND GYNÆCOLOGICAL SOCIETY.

MEETING HELD AT SHEFFIELD, FRIDAY,  
NOVEMBER 19TH, 1909.

Dr. J. W. MARTIN (Sheffield), President, in the Chair.

Dr. DONALD (Manchester) read notes of a case of *Wertheim's operation for advanced cancer of the cervix*, which was followed by uræmia. Only four ounces of urine were passed on the first two days, and none at all on the third; on the fourth and fifth 62 and 120 ounces respectively were passed, and the patient appeared to be making good progress. On the sixth day coma set in, and death occurred a few days later. At the post-mortem examination the right kidney was found to be the seat of old cystic disease and to contain but little secreting tissue, whilst the left ureter had been constricted by a ligature. The left kidney was engorged, but appeared to have been healthy before the operation.

Dr. H. BRIGGS (Liverpool) recorded a case in which he had removed a *pyosalpinx*, on account of pelvic pain of a month's duration, from a ii.-gravida, who was two months pregnant. The operation was performed three weeks ago, and the pregnancy is apparently undisturbed. Dr. Briggs also gave the details of a case of old-standing left-sided *pyosalpinx*, for which the patient had refused operation three years previously. She improved and bore two children, but during the last nine months several attacks of pelvic pain had occurred. Recently the left ovary and the tube, which contained pus, had been removed.

Mr. PERCIVAL E. BARBER (Sheffield) read the notes of a case in which he had performed total abdominal hysterectomy for *placenta prævia centralis*. The patient, a iv.-gravida, had been losing for a week before admission to hospital. Vaginal examination caused profuse hæmorrhage, which necessitated plugging the cervix and vagina. When Mr. Barber saw the patient, she was blanched and apparently moribund; the pulse-rate was 140. The uterus, containing a dead full-time child, was removed, two pints of saline being, meanwhile, infused intravenously. The patient made a good recovery. The following specimens were shown:—

Dr. Lloyd Roberts (Manchester): A uterus which had been removed for *malignant disease of the corpus*. It was found to contain a fibroid polypus whose base was invaded by glandular carcinoma arising from the neighbouring endometrium. The apex of the polypus was quite free from malignant disease. The patient was a multipara of 65, who had ceased to menstruate at 50. For three months there had been almost constant hæmorrhage, with floodings, accompanied by severe pain, on three occasions.

Dr. J. E. Gemmell (Liverpool): A *sarcoma of the mesentery*, which clinically had simulated an ovarian cyst with long pedicle.

Dr. W. E. Fothergill thought the microscopical appearances were those of a perithelioma.

Mr. R. Favell (Sheffield): A round-cell *sarcoma of the vagina*, occurring in a single woman, æt. 25. The hard, nodular growth was easily enucleated, and removed with its covering of vaginal wall.

Mr. P. E. Barber: A full-time *ectopic gestation sac*, which had been successfully removed from a multipara, æt. 34. Soon after the commencement of the period of nine months' amenorrhœa, she had experienced a sudden attack of right-sided pelvic pain, with a feeling of faintness; this was not accompanied by external hæmorrhage. The fetal movements, which had been very violent and painful, had ceased six weeks before admission. There was no history of spurious labour pains. The sutures of the softened fetal head could be easily felt through the thin abdominal wall, and the state of affairs was readily

diagnosed. The sac, which was largely extra-peritoneal, was removed entire, with the body of the uterus, to which it was intimately united. The left appendages were normal. The right could not be found, either at the operation, or on later examination of the specimen. The right round ligament ran into the sac. The placenta, greatly thickened by blood clot, was attached to the back of the uterus and to the tissues at the base of the broad ligament.

Mr. Barber also showed a uterus with a right *tuberculous pyosalpinx* and a left tuberculous tubo-ovarian swelling. A nodule of caseating material enlarged the right angle of the uterus, around the intestinal part of the tube. The parietal and visceral peritoneum was studded with tubercles.

Sir William Sinclair showed long *sea-tangle tents* suitable for the induction of labour. The tents were six or seven inches in length. Similar ones had already been used, with good results in several cases.

## LIVERPOOL MEDICAL INSTITUTION.

## PATHOLOGICAL AND MICROSCOPICAL SECTION.

MEETING HELD THURSDAY, NOVEMBER 11TH, 1909.

Mr. T. H. BICKERTON in the Chair.

THE following specimens were shown:—

Epithelial odontome; exophthalmic goitre; three epitheliomata from one lip, by Mr. Thelwall Thomas and Mr. Mackarell.

Melanotic sarcoma of the eye, two cases; pseudoglioma of the eye, by Dr. Stevenson and Dr. Harcourt.

Melanotic sarcoma; glioma of retina, by Mr. Charles G. Lee and Dr. Harcourt.

Hour-glass contraction of the stomach, by Dr. Gordon Gullan.

Skull and brain, pneumococcal meningitis, by Mr. R. E. Kelly and Mr. Mackarell.

Phagocytosis of pneumococcus in cerebro-spinal fluid, by Dr. Ernest Glynn.

Naso-pharyngeal fibroma; tracheal tuberculosis, by Mr. Thomas Guthrie.

Malignant streptococcal endocarditis; primary carcinoma of adrenals; congenital cystic kidneys from a man, æt. 44, and tubercular appendix, by Dr. Nathan Raw.

Thoracic aneurysm with rupture into superior vena cava, by Dr. Lloyd Roberts.

The specimens were discussed by Drs. Bradshaw, Marsh, Murray, Bligh, Hay, E. E. Glynn, J. H. Abram, and Harcourt.

Dr. R. J. M. BUCHANAN read a short paper on  
OBSERVATIONS ON CYTOLOGICAL METHODS.

He held that in the body as a whole somatic or systemic death took place: the same term is applicable to the death of the cell as a whole, and that systemic cell death takes place prior to disintegration. Recognising the occurrence of death of the individual in instantaneous rigor or cadaveric spasm, he held that cells could die in instantaneous rigor, that this condition is produced and preserved permanently by the most approved methods of instantaneously fixing tissues during life, and that by this means cells could be fixed in any phase of their existence, and the appearances coincident with their latest activities permanently recorded. He drew distinctions between cells which were allowed to die slowly prior to examination of cells *in vitro*, being regarded as equivalent to examination *in vivo*, and pointed out the danger of the tendency to regard these terms as synonymous in experimental methods.

The paper was discussed by Drs. G. C. E. Simpson, Harcourt, E. E. Glynn, and J. Hill Abram and Dr. Buchanan replied.

The paper was illustrated by microscopic specimens showing cells fixed and preserved in instantaneous rigor.

## CENTRAL MIDWIVES BOARD.

MEETING HELD NOVEMBER 25TH, 1909.

Dr. CHAMPNEYS in the Chair.

## THE RIGHT OF PRACTITIONERS TO DISMISS MIDWIVES.

THE case of a midwife who had been dismissed from a case by the medical man, whom she had called in on account of the condition of the baby's eyes, was dealt with at some length. A letter had been received from the M.O.H. for Bolton, asking for advice in the matter. The facts, as stated, were that the midwife, soon after effecting delivery, noticed that the child's eyes were inflamed, and summoned a doctor. He pronounced the case to be one of ophthalmia, and told the midwife to cease her attendance altogether. There appeared to be nothing abnormal in the mother's condition. The questions arose whether the midwife ought to have obeyed his instructions (as she did), when the rules of the C.M.B. make her responsible for the care of the mother for 10 days, and whether any doctor, other than the local supervising authority, has any right to dismiss, or in other words, suspend a midwife from her duties. There was a division of opinion, some offering a distinct negative to these questions, but the Standing Committee had drafted a reply to the following effect:—

(a) That it would not have been right for the midwife to have disobeyed the instruction of the medical man, and to have kept on with the case until she had received notice from the Local Supervising Authority.

(b) That the medical man being responsible for the case, his orders, however ill-considered, must be obeyed. (Rule E. 6.)

(c) That as regards the question of suspension of the midwife to avoid spreading infection, this was not necessary.

Sir GEORGE FORDHAM suggested that the Board was not called upon to give advice upon such matters, upon which the question was asked. After further discussion, a resolution was passed by the majority to the effect that the letter should be acknowledged without any advice.

Several letters had been received with reference to the admission to the Roll of women who had failed to enrol themselves under Section 2 at the proper time. This had already been done, under special circumstances once or twice, and the principle is embodied in one of the recommendations of the Select Committee; but Sir George Fordham objected that the Board had no legal right to do so. Accordingly a resolution was passed that the Privy Council be requested to sanction an alteration in the rules, enabling the Board to enrol women who, through no fault of their own, had failed to enrol themselves before April 21, 1905.

## THE ADMINISTRATION OF DRUGS BY MIDWIVES.

Miss Bernard-Boyce, the Inspector of Midwives for Norfolk, had written, asking for information as to the extent of the right of a midwife to administer drugs. It was agreed—

That a reply be sent embodying the principles laid down in a circular letter to the examiners, dated June 8th, 1907, on the subject of the administration of drugs by midwives.

This letter states that a midwife is not to be discouraged by the examiners from giving certain drugs which she has been taught to use in her training-school, provided she satisfies the examiners by her knowledge of them. Mr. GOLDING-BIRD appeared surprised that midwives should be allowed to "prescribe," as he expressed it, but the Chairman pointed out that certain drugs were essential in the practice of midwifery, and it was impossible to allow a woman to die because the midwife was not to give ergot, for example. Miss PAGET wished to accentuate the distinction between a midwife and a nurse, the former being qualified to act in cases of normal labour without a doctor.

Approval as a training school was granted to the following hospitals:—Cama Hospital and Allbless Hospitals, Bombay, Civil Hospital and Victoria Hospital for Women and Children, Hong-Kong, Home

for Mothers and Babies, Woolwich (subject to a satisfactory report from the local supervising authority).

Dr. Atkinson's motion:

That it be referred to the Standing Committee to consider and report as to any administrative methods which it may be desirable to vary in the light of the report of the Midwives Act Committee, was carried, also a resolution put forward by

Mr. Parker Young:

That one member of the Central Midwives Board be elected as a direct representative by the registered medical practitioners in England and Wales, in the same manner and at the same time as the direct representatives on the General Medical Council are elected.

A letter had been received from the Hon. Secretary of the Chelsea Division of the Metropolitan Counties Branch of the British Medical Association, enclosing a copy of a resolution passed at a meeting of the medical practitioners of Chelsea and Fulham, refusing to attend women in, or immediately after childbirth, or in respect of puerperal maladies, in response to emergency calls from midwives, unless the Boards of Guardians of Chelsea and Fulham guarantee to pay the fee. The Board agreed to forward this communication to the Privy Council.

The next general meeting will be held on December 16th.

## CORRESPONDENCE.

FROM OUR SPECIAL CORRESPONDENTS  
ABROAD.

## FRANCE.

Paris, Nov. 28th, 1909.

## VULVO-VAGINITIS IN CHILDREN.

VULVO-VAGINITIS is a frequent affection in children. The infection is localised first in the vulva and subsequently extends to the vagina. The labia are inflamed and the mucous membrane covered with mucopurulent secretion of yellowish colour, and frequently very abundant. Where vaginitis exists at the same time, the matter exuded through the perforation of the hymen.

Examined through the microscope, the flora presents, besides polynuclear leucocytes and epithelial cells, ordinary pyogenic microbes, staphylococci, and, in a number of cases, gonococci, especially where the pus has a phlegmonous aspect.

The one cause of vulvo-vaginitis, says Dr. Marfan, is contagion. Transmission is generally effected by cohabitation in the same bed with a person, mother or sister, affected with leucorrhœa. The secretions staining the sheets come in contact with the vulva; certain toilet articles, as towels, sponges, etc., might also be incriminated. Contagion may also take place in schools by water-closets, and, above all, by onanism.

The influence of rape has been very much exaggerated, and prudence should be observed in giving an opinion on the possibility of criminal contamination.

The complications of vulvo-vaginitis in children are more or less those of adult women, but the gravest and the most frequent is that of peritonitis due to gonococci. It sets in suddenly with rigor, fever, extreme pain in the abdomen, vomiting of greenish matter, and griped face. The abdomen is swollen and sensitive to pressure, especially in the hypogastric region. The pathognomonic sign of this form of peritonitis is intense cyanosis of the extremities; the cheeks, ears, nose, hands and feet are violet and cold. However, all those alarming symptoms, which would seem to forebode a speedy fatal termination, disappear gradually in ten or twelve days; consequently, no surgical intervention should be thought of. Among other complications may be mentioned purulent ophthalmia, acute rheumatism, and endocarditis.

Several varieties of vulvo-vaginitis may be observed: vulvitis due to saprophytes and met in ill-cared and

ill-nourished children, pyodermic vulvitis (impetigo, aphthæ), pseudo-membranous vulvitis provoked by diphtheria and eczema of older girls (difficult to cure).

The treatment of vulvo-vaginitis is tedious and difficult. The parts should be frequently bathed with a solution of permanganate of potash (1-500). A soft Nélaton catheter of fine calibre is introduced into the vagina through the foramen of the hymen and adjusted to the douche; the liquid should flow with gentle pressure so as to guard against distension of the vagina. The child should be kept in bed for three or four days, as walking increases the secretion. After each injection a piece of antiseptic gauze should be placed between the labii.

In chronic cases the parts might be touched with a solution of nitrate of silver (1-100), while general treatment, tonics, cod-liver oil, etc., should not be neglected.

#### PYRAMIDON IN ODONTALGIA.

By reason of its anti-neuralgic properties and its perfect tolerance, pyramidon is an excellent remedy for all forms of odontalgia. In continued and excruciating pain, 10 grains three times a day give great relief. To calm the pain after extraction of a tooth, a wafer of 10 grains taken ten minutes before the operation is very successful. In periostitis one or two wafers give also relief, the last to be taken at bedtime. Neuralgia of the trigeminus yields also readily to salicylate of pyramidon.

#### PEDICULI OF THE HEAD.

Petroleum, 4 oz.  
Peru balsam, 1 oz.  
Olive oil, 2 oz.

#### SCABIES.

Proof spirit, 1 dr.  
Peru balsam, 4 dr.  
Benzoic acid, 15 gr.  
Oil of cloves, 1 m.  
Vaseline, 4 oz.

#### ECZEMA.

Sulphur, 15 gr.  
Salicylic acid, 15 gr.  
Camphor, 15 gr.  
Cade oil, 2 dr.  
Oxide of zinc, 4 dr.  
Vaseline, 1 oz.

#### GENERAL PARALYSIS.

General paralysis, or softening of the brain, is an affection usually considered refractory to treatment. However, it would seem that, with nucleinate of soda, given in large doses, great improvement, and sometimes a complete cure, can be obtained. Two drachms and a-half of a ten per cent. solution are injected every three or four days subcutaneously. The local reaction, however, is sometimes very great, the temperature rising to 104°, and abscesses may result which require incision, but frequently they yield to application of cold compresses.

Out of 21 patients treated by these injections by Prof. Donath, 10 were sufficiently cured to return to their work, 5 were considerably improved, while 6 experienced no benefit.

#### GERMANY.

Berlin, Nov. 28th, 1909.

At the Medizinische Gesellschaft, Hr. H. Neumann spoke on

#### PREGNANCY AND GLYCOSURIA: THEIR MUTUAL RELATIONS AND TREATMENT.

He said it was already recognised on many sides that diabetes and pregnancy were not often met together. Naturally, he had only the excretion of grape sugar in mind in discussing the subject, as milk sugar and pentose were excreted during pregnancy.

The excretion of grape sugar might be either a pure alimentary glycosuria, or it might be a true diabetes; even this demanded a lengthy period of observation. Independent of the difficulty there was in pregnancy taking place in diabetes, the combination of the two was the more rarely observed, as the woman who was pregnant was inclined to attribute her troubles to the pregnancy, and to say nothing about them. That class

also had to be separated in which the diabetes was present before the pregnancy began from that in which it came on first during the pregnancy.

Whilst fewer women were diabetic than men, the mortality was greater amongst females, the majority of them dying between the ages of 30 and 40—i.e., during the period of sexual activity. In spite of this, the danger of coma, as well as of tuberculosis, the chief dangers in diabetes, was not increased by the pregnancy.

In the speaker's opinion the induction of premature labour was not indicated; the interruption of the pregnancy had no influence on the diabetes. On the other hand, any operation on a diabetic patient was a danger when associated with excitement, and was at most permissible in cases of repeated pregnancies that were the cause of distress to the patient. He had observed 6 cases of gravidity with diabetes; the labour ran a favourable course in each; neither during the pregnancy, nor the labour, nor during childbed, were there any untoward disturbances.

He took the comprehensive standpoint that diabetic maidens should not marry, that married ones should not conceive. Should a diabetic woman, however, become pregnant, the pregnancy should not be interrupted, but the patient should be watched carefully, and subjected to a rational diet.

Hr. Kraus bore tribute to the correctness of the views expressed, and asked whether the infrequency of pregnancy in diabetes was due to disturbed tissue change or to some complication such as endometritis, which was by no means infrequent in that disease.

Hr. Gottschalk was of opinion that the disturbances in the sexual apparatus of diabetic females were due entirely to disturbance of tissue change, as was shown by the frequent amenorrhœa, as well as by the more rare hæmorrhage, that accompanied it. Interruption of the pregnancy was not necessary in diabetes; regulation of the diet was generally sufficient.

Hr. Leopold Landau believed that diabetic women were so rarely pregnant because they had amenorrhœa from disturbance of tissue change in the ovary. The danger of diabetes in gravidity was not very great when the diet was rational.

Hr. Hirschfeld was of opinion that gravidity was a grave complication of diabetes, but he would not advise interruption of the pregnancy. He pointed out that the excretion of sugar frequently improved after the climacteric.

Hr. H. Elsner showed a new gastroscope modified from the idea of the cystoscope. For the purpose of passing the flexure of the œsophagus readily it was provided with an indiarubber tip. He also showed a number of drawings of the interior of the normal stomach taken from life.

Hr. Klemperer said that the stiff tube was dangerous and exceedingly disagreeable to the patient. Gastroscopy would not be of any practical importance until a usable instrument made of flexible material was brought out.

At the Verein für Innere Medizin und Kinderkrankheiten, a discussion took place on an address by Hr. Immelmann on

#### THE PRESENT POSITION OF THE RÖNTGEN EXAMINATION OF THE URINARY APPARATUS AND CONCRETIONS.

He said the difficulties of bringing the urinary apparatus on to the plate were extremely great, but in the cases of urinary concretions they were not so great.

Hr. Zodek said that from the illustrations shown by Immelmann it was evident that diagnosis had become more refined. Whether the shadows were cast by stones could sometimes be determined by a comparison of the forms of these shadows with concretions.

Hr. Roth said the question frequently came up whether certain symptoms were caused by nephritis or calculi, and here a Röntgen examination was a great help. In Caspar's Klinik very few Röntgenographic deceptions had taken place.

Hr. Klemperer appeared to summarise the opinions of speakers when he gave a report of his own experiences during the past two years. On 7 occasions when the plate was negative he had removed calculi; three

times the plate showed a stone when none was found at the operation. He now required that two plates should be taken, and that the shadow must show in the same place in each; but even with this precaution there had been an error of diagnosis in one case. One must, therefore, maintain an attitude of reserve in regard to Röntgen pictures.

### AUSTRIA.

*Vienna, Nov. 28th, 1909.*

#### FUNCTIONAL DISTURBANCE IN THE PYRAMIDAL REGION.

At the Gesellschaft der Aerzte, Strümpell presented a child with an abnormal sense of feeling on the left side of the face, which was followed by Jacksonian epilepsy. This commenced in the lower part of the face, and extended rapidly over the left side, affecting first the arm and then the leg, followed by severe headache and vomiting. The papillæ at the fundi of the eyes were greatly congested, and seemed to depend upon some tubercular centre. The patient suddenly became febrile, with a catarrhal condition in the apex of the left lung. Closer examination showed that the grosser sensations could not be recognised, such as pain, temperature, and touch. On the other hand, the feeling of dryness or weight appeared as a heavy, deep pressure; when the finger was drawn heavily across the skin it seemed to the patient as an isolated movement. It was thus evident that the function of the pyramidal paths which convey the finer movements and sensations were unaffected, while the others, more rough and exposed, were disturbed.

#### MEASUREMENT OF BLOOD PRESSURE.

Winternitz said that the measurement of the blood hitherto was recognised under two different methods, viz., pressure in the blood vessel and resistance of the vascular wall, which can scarcely be separated one from the other. When the vascular wall is greatly thickened we find that the apparatus registers a higher blood pressure than another vessel under the same circumstances with a thinner wall. This experiment can be easily performed with two india-rubber tubes whose calibres are the same, and the water pressure equal in both. It will be observed at the outlet that it requires a greater force to check the thick wall tube than it does to stop the thinner wall tube. Federn retorted that arteries were not comparable to india-rubber tubes, as a thick-wall artery often gave a lower pressure than did a thin-walled vessel in similar circumstances. Exner said that Basch had proved in a normal radial artery that the external pressure was three m.m. of mercury higher than the internal pressure, even when the vessel was almost closed by compression. Stejskal remarked that the experiments of Basch were even higher than that, as he records a case where a rigid carotid had an external pressure of 8 m.m. more than the internal to close the lumen. Winternitz replied that his remarks were confined entirely to clinical results, and he was led to the conclusion by his observation in men with high blood pressure, who have no cardiac hypertrophy, although this condition may exist for years.

#### WASHING OUT MIDDLE EAR.

Urbantschitsch read a short article on the treatment of the middle ear when suffering from chronic otitis. After the ear has discharged for a long time, it is difficult to clear the middle ear out without washing through the eustachian tube from the pharynx, as the tube itself is usually more or less involved in the inflammation. He, therefore, recommends a thorough washing of the nasal cavity and tube, after which he inserts into the eustachian tube a celluloid bougie well smeared with an astringent. He considers this form of treatment also suitable for perforation of the tympanum.

#### HORSE-SHOE KIDNEY.

Paschkis next presented three cases of this disease, one of whom was 57 years of age, who had complained for ten years of a burning pain on passing water, which was associated with strangury, and he never was able to retain urine more than two hours, by day or by night, the fluid being always very muddy. A few weeks before admission to hospital he was attacked

every 24 hours in the right renal area. An examination gave very little information, the part being somewhat sensitive to pressure, while the lower pole of the kidney could be easily felt. The urine was cloudy, containing pus and bacteria, while the cystoscope revealed chronic cystitis, and the ureters in their normal position. The Röntgen rays revealed a small stone about the size of a hazel nut in the right kidney. With regard to the ureters the right contained pus and diluted urine, while the secretion from the left was free from pus and contained normally concentrated urine. The indigo carmine test was delayed in the right kidney, with a very feeble reaction.

It was decided to operate, with the following result: The upper pole of the kidney was easily removed, in it could be felt the stone; the lower pole lay embedded in cellular tissue across the spinal column towards the left side, forming a horse-shoe. The right half of the kidney was somewhat friable and bled profusely on removing the stone, while around the pelvis of the organ the vessels were greatly dilated.

About two months after the operation another stone was removed from the funnel-shaped wound, though nothing could be seen or felt during operation. Since then the patient has recovered health, the urine is healthy, and he is now considered perfectly well.

### HUNGARY.

*Budapest, Nov. 27th, 1909.*

#### THE SUBCUTANEOUS EXTIRPATION OF CERVICAL GLANDS.

OWING to defective hygienic conditions, there are too many cases of cervical glands to be found in Hungary. In fact, if we look at the statistics of the surgical operations done in a provincial general hospital, we at once confirm our statement by the striking large number of operations performed on account of cervical glands. As most of the cases occur in women, owing to their less out-door occupation, the resulting scars, which disfigure the neck, were ever the subject of investigation, how they could be removed, and as the removal itself leaves some, though a thread-like, scar, our surgeons had to look after some more efficient procedure of dispensing with the disfiguring scars. Dr. Dollinger, Professor of Surgery at the University of Budapest, has finally found an effective method of extirpating the glands without leaving a visible scar on the neck. Nominally, he makes an incision close to the anterior end of the hairy scalp, sufficient to put in two fingers to separate the skin of the nuch until he reaches the glands to be removed. With a little practice, these glands can be severed from their base without the aid of a knife or a scissor, simply by means of adequate manipulation of the fingers. After the removal of all the glands, the pouch is irrigated with a weak solution of corrosive mercury, and the incision wound closed by stitches, leaving in drain tubes at both ends of the wound. The operation can be performed only in cases where the glands are not yet suppurating. If the separation of the glands is difficult, or it endangers the tearing of a gland, then Dollinger uses an elevator invented by himself for this purpose. In most cases he is able to remove all the glands without seeing the field of the operation. The finger-tips feel even the smallest glands with a little practice. However, in cases where small glands are felt in great number, then it is advisable to reflect light into the pouch between the skin and the neck. This cannot be done in every case, particularly where the skin is rigid, and not loose.

The manipulation does not bruise the tissues, and there is no danger of tearing veins or arteries. Of course, great care must be taken to save them from violence. Dr. Dollinger has such a great practice in performing such operations, that he is able to perform them in 15-20 minutes, even where there are as many glands as in a potato field.

He warns his followers on these points:—

(1) If those glands are infiltrated which surround the accessory nerve under the upper end of the sternocleidomastoid muscle, then the nerve must be carefully separated. This being near to the site of the

incision, the field of operation can be seen, and the fingers controlled by the eyes.

(2) If there are infiltrated glands within the pouch of the sub-maxillary gland, then this pouch must be cut prior to the digging out of the infiltrated glands. Care must be taken not to injure the facial vein.

(3) The hæmorrhage is of no importance in most cases. If, however, there is considerable bleeding, then the best thing is to plug the pouch, and continue the operation next day.

Dollinger performed this operation in 200 cases, out of which 167 healed by primary intention, in 33 cases suppuration ensued for a short time.

On the day following the operation most of the patients suffered from an acute tonsillitis, probably as the result of the traumatic influence of the manipulation. However, this is of no importance, and the symptoms connected with it generally subside in two or three days.

### WINTER VOYAGES FOR HEALTH.

[FROM AN OCCASIONAL CORRESPONDENT.]

THE popular notion of taking the annual holiday when "the sun shines on both sides of the hedge" has, like everything in this mundane existence, its drawbacks. When the holiday is past, we have all the worst of the weather of our fickle climate in front of us, whereas by deferring it to the winter we can break through the monotony of fog and cold, and escape by sea without great expense to sunshine and warmth. There are, doubtless, many of your readers like myself, to whom absence from home is not always convenient in summer, and having once taken my outing in winter by accident, I now invariably do so from choice. The route I followed on the present occasion (November 2nd to November 22nd) would appear not to be well known to English travellers, and with your permission I will give a few notes for their information, after a voyage which has afforded me healthy recreation at quite a modest outlay. Let my readers bear in mind, if bad sailors, that a sea voyage is not necessarily all sea, that by this route (the Nederland line, whose ships sail fortnightly from Southampton) they can land for a few hours every second day and gain knowledge of other countries, which would be unendurable during the summer months. Nor need they fear the weather, as after the equinoctial gales of October, one can generally count on the dictum that "After a storm comes a calm," and having taken a dozen voyages during November, December, and January, my experience goes to prove the rule, the present being no exception. The first thing that arrests one's attention on the Nederland ships is the troop of Javanese attendants, with their turbaned heads and sandalled feet. Java having been ceded to Holland by Great Britain at the beginning of the last century, the Dutch make good use of their colonial subjects, in the same way that we find our Indian subjects on board the Peninsular and Oriental line. These little men, whose stature is about that of the Japanese, have very pleasing faces, wait upon your every possible comfort, both in the cabin and at table, move about as noiselessly and as swiftly as cats, seeming to delight in doing duties obviously agreeable to them.

Our first port of call was Lisbon, but the capital of Portugal can by no stretch of imagination be pronounced attractive. It has one magnificent avenue in the residential quarter, where the date-palms and semi-tropical shrubs luxuriate, but elsewhere, as with most large seaports, everybody seemed on the rush, and the shipping interests reigned supreme. Our next stopping place, Tangier, was of a totally different character, interesting beyond expression, dirty beyond description. What a seething population was here, every nationality under the sun seemed to jostle you everywhere along its narrow thoroughfares, and as the native part of the city is built on the slopes of the mountain-side, donkeys do the duties of vehicles, for visitors with or without impedimenta, Arabs in their quaint costumes, and Nubians with not too much of the latter, are here

"moved on" in this primitive, happy-go-lucky method of a semi-civilised and ancient people. In the seething crowd were snake-charmers, Kabyles, with their numerous wives, whose eyes only were visible to the common horde, itinerant vendors of every conceivable commodity, and donkeys innumerable. On the shore were encamped hundreds of Moors who, on our return a few days later, had struck their tents and gone to the war. We saw a scuffle between a wiry Arab and a fat little Spanish gendarme; the latter was getting the worst of the argument, and we thought it wiser not to stay. Doubtless, much of the excitement prevalent when we were there was owing to the proximity of Tangier to the seat of war, yet in spite of its nastiness from a sanitary point of view, we left with the most pleasurable reminiscences of the buoyancy and spirit of its people. From here we steamed on to Algiers, through Gibraltar and the Mediterranean, but as I have previously described this cosmopolitan centre in your columns, and it is better known to English folk than Tangier, I need not further allude to it. It was a delightful run from Algiers past the Atlas range on to Genoa, in which latter city we stayed four days, awaiting the return steamer.

Genoa, which although not a city to tempt one for the sake of pleasure, is one nevertheless of great historical and architectural interest. Abutting on the main thoroughfares stand the magnificent palaces of the nobles and the doges, who governed and warred against neighbouring States, until the proud Genoese were finally subdued by the Venetians. These relics of a mighty past are still in perfect preservation, and give additional zest to the imagination when recalling the history of bygone ages. Genoa is also a convenient centre from which to take excursions to the magnificent mountain and coast scenery of Portofino, the health resorts of Rapallo, Nervi, and other spots on the Levantine Riviera now coming to the front.

Our return boat was the *Vondel*, a new and very fine ship of the Nederland Company, whose boats are officered by a most courteous set of men, who, although of Dutch nationality speak excellent English, and do everything possible to make the voyage agreeable. The food also is varied and ample, and the cost of the voyage exceedingly moderate. When I mention that the twenty days' voyage out and home cost but £16 10s. for first saloon, inclusive of everything except wine, it will, I think, be considered a luxury of sea voyages in search of health at a minimum expense.

### FROM OUR SPECIAL CORRESPONDENTS AT HOME.

#### BELFAST.

A QUESTION OF FEE.—An interesting case came up in the Recorder's Court last week, when Dr. W. H. Ferran sued the Belfast Corporation to recover 10s. 6d., a fee for professional services to a child who had been injured by a Corporation tram-car. It appeared that the child was knocked down by a car, and carried to the nearest doctor's house by a civilian, accompanied by the tram conductor. Dr. Ferran attended to the case and dismissed it, and shortly afterwards a tram inspector called to inquire as to the nature of the child's injury. The man who carried the child stated that he had picked it up, and at the suggestion of the conductor carried it to the doctor's. For the defence it was said that what was done as a voluntary and humane action was here sought to be turned into a matter of £ s. d. It was estimated that there were about twenty-five tram accidents every day in the city, and if doctors were to be paid for first aid in every case, it would mean thousands a year. Fees had been paid before, but in those cases the injuries were serious, and the doctors had been put to special trouble and pains. His Honour said that the child was knocked down by a tram-car belonging to the Corporation, and by the direction of their servants the child was taken to the doctor. He held the Corporation liable, and he gave a decree for the amount

claimed. Undoubtedly the profession in Belfast owes a debt of gratitude to Dr. Ferran for fighting this case, for here, as elsewhere, the public is only too ready to be "humane" at the expense of the doctor.

**THE WOMEN STUDENTS OF QUEEN'S UNIVERSITY.**—The first of the geographical changes brought about by the establishment of the new University took place last week, when the women students moved into what was lately the Registrar's house, on the south side of the College, deserting the stuffy little rooms which till now have been sacred to their use. The old rooms did well enough for the dozen or so of women who attended classes in the early days of their admission, but now there are over a hundred women attending, and suitable rooms are a necessity. The students gave an "at home" on taking possession of the new rooms. These are large and airy, and will afford ample accommodation for meetings of clubs and societies, as well as ordinary reading and luncheon rooms. The Vice-Chancellor, in speaking at the opening, said it was interesting to recall the fact that these rooms had for many years been the home of the great Professor Andrews, who was a strong opponent of the movement for the admission of women students.

**DONEGAL COUNTY COUNCIL SCHOLARSHIPS.**—The Donegal County Council have decided to give six scholarships each year, of the value of £45 per annum for three years, four to be given to students going to the National University, with an Irish language test, and two to students going to Dublin University or Magee College, Londonderry, or any other University the student may select. It was at first proposed that the two last-named scholarships should be given to students attending the Queen's University of Belfast, but not unnaturally this was objected to by the friends of Magee College, whose influence is strong in Donegal, as Derry is practically the business centre for that county.

## LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

### A MEMBERSHIP DIPLOMA FOR ALL THE ROYAL COLLEGES OF SURGEONS.

*To the Editor of THE MEDICAL PRESS AND CIRCULAR*

SIR,—With heartfelt gratitude, I re-echo the question of "An Old R.C.S.I. Student" in your issue of November 24th last:—Why should there not be a membership of the Royal College of Surgeons of Ireland? Why, for that matter, should there be licentiates and fellows of the College in Scotland and of Ireland, and members and fellows of the Royal College of Surgeons of England? What is the reason for this senseless multiplication of qualifications that has been going on since bluff King Hal set the ball a-rolling by founding the Royal College of Physicians of London? The insensate and selfish rivalry of the competing schools has ended in a very Babel. The community asks for a qualified medical man, and the rival Boards give him a selection of a score and upwards, designated by grotesque and variegated titles and high-sounding names. The public will be content with a one-portal qualification for medicine, as there is a single one for law. It is only close corporations that hug the many portals to the undoing of their diplomates and of future generations of students. By all means let us adopt Mr. A. T. Norton's excellent suggestion and begin the simplifying process by amalgamating all the diploma-granting bodies of the United Kingdom with a State University degree of Medicine. Surely a profession so humane and intellectual as that of medicine should hail the prospects of equal opportunity with enthusiasm. Why should the diplomates give quarter to the corporations which have taken their money and have given no vestige of participation in the affairs of the Colleges to the lower ranks of their alumni? The Edinburgh College of Surgeons have repeatedly declined to take any steps towards instituting a membership diploma for the benefit of their

licentiates. It is a pity the Scotch and Irish licentiates cannot join in presenting a strong united protest to the Government, asking for inquiry into the present chaotic system of medical qualification, with special reference to their own Colleges, with the non-representative control, and their non-elective representation on the General Medical Council. Meanwhile, the Colleges will be wise in adopting a conciliatory attitude as regards the grievances of their diplomates.

I am, Sir, yours truly,

A MERE LICENTIATE.

### SUPPURATION IN THE ACCESSORY NASAL SINUSES.

*To the Editor of THE MEDICAL PRESS AND CIRCULAR.*

SIR,—Owing to what is obviously a misprint of "majority" for "minority" in the quotation from my lecture in my reply to "A Dental Surgeon," there is an apparent contradiction between it and the view expressed lower down.

The view I have endeavoured to express is, that it is only in a large *minority* of the cases that dental caries, etc., can be shown to be a direct cause of maxillary suppuration.

I am, Sir, yours truly,

JAMES DONELAN.

Manchester Square, W.,  
November 17th, 1909.

### "THE DEADLY LEAVEN OF VENEREAL DISEASE."

*To the Editor of THE MEDICAL PRESS AND CIRCULAR.*

SIR,—Permit me to draw attention to a passage in your notes this week which must, I think, have been written under a misapprehension. You speak of a salutary British law, intended to check venereal disease, being abolished by a weak Government, "with the result that venereal disease has since been unrestrainedly at work among all classes." I believe this statement is not borne out by the facts. On the contrary, there has been for the past 24 years an almost unbroken yearly diminution of venereal disease.

It is true that when the operation of the Contagious Diseases Acts was first suspended in England the statistics of disease in the Army—practically the only, or almost the only, reliable statistics as to these diseases—did go up. This went on for two or three years, each year being—though in diminishing ratio—worse than the last. Apparently it is this fact which has been persistently quoted ever since, as a proof that it was a blunder to do away with the Acts, no account being taken of anything that has happened since. But what did happen? In spite of this increase of disease, the Acts were not put in operation again, but were, in 1886, finally rescinded, and from that very year there has been a steady, continuous diminution of venereal disease in the British Army. The official figures are as follows, the increase in 1901-1903 being accounted for by the South African War. The figures represent admissions to hospital for venereal diseases per thousand of the troops. In 1885 the figure had reached 275 per thousand. Then follows:—1886, 267; 1887, 252; 1888, 224; 1889, 212; 1890, 212; 1891, 197; 1892, 201; 1893, 195; 1894, 182; 1895, 174; 1896, 158; 1897, 140; 1898, 133; 1899, 122; 1900, 93; 1901, 105; 1902, 123; 1903, 125; 1904, 108; 1905, 91; 1906, 82; 1907, 72.

Other statistics, official and unofficial, seem, as far as they go, to indicate the same thing—a real reduction of disease of this kind in our population, civil and military.

Things are bad enough still, but it is not desirable that we should make them out worse than they are.

I certainly am not one of those, if there are any such, who would have these diseases kept going as a scourge for either the guilty or the innocent. I think we need to use every available means of prevention and cure. But I think it is hardly realised even yet to what an extent everything depends on the goodwill of the individual. At a time when the Contagious Diseases Acts were in full blast in India, the young soldier was told in the barrack-room that he was "not a soldier" till he had "had his three doses of disease," and he promptly went and got it, spite of



all official arrangements for his doing otherwise. Nowadays the Army authorities are awake to this; they are enlightening the men and getting gradually a better tone in relation to this matter. Improvement may be slow, but it is real and vital progress, and, as an Army Medical officer said the other day, in a lecture before the Eugenics Society, "Our Army is the only one that shows an improvement in this respect."

So let us work on, not as those who are without hope. Doctors have an immense influence in their hands if they will only use it. But as to the system embodied in the Contagious Diseases Acts, I say what I know when I say that in those countries where it still exists it is the despair of its very adherents.

I am, Sir, yours truly,  
B. LEPPINGTON,

Member of the International Society for the  
Prophylaxis of Venereal Diseases.

November 20th, 1909.

#### QUACK "TONICS" CONTAINING ALCOHOL. To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—The enormous increase in the use of quack medicines in late years has made it necessary, in a large proportion of cases, to inquire in what way the patient has been dosing himself before presenting himself for treatment. This inquiry sometimes needs tact. Many persons are averse to confessing their faith in quackery, and parents especially are often ashamed to admit that they have added to their children's sufferings or imperilled their lives by "home" treatment with advertised nostrums. Very often, during treatment by their medical adviser, patients go on using some pernicious compound which is itself either giving rise to or aggravating the symptoms for which relief is sought. This is especially the case with the largely advertised "tonics," the sole potent ingredient of which is alcohol. I have lately seen a typical case. I think it is worth the briefest possible description, if only for the sake of junior practitioners. I confess that the patient had been to a young practitioner in this neighbourhood before coming to me, and I was not able to defend him when my patient expressed his discontent that the questions I put had not been suggested by my neighbour. The patient was a dark, "bilious," middle-aged merchant of sedentary habits. He complained of being run down, and depressed sometimes almost to the point of suicide. He thought he needed tonics and stimulants, and, in addition to two or three whiskies and sodas during the day, with a superabundance of solid food, he had for some weeks been taking during each day three glasses of the most widely advertised alcoholic quack "tonic." His symptoms, including habitual constipation and a tendency to piles, were exactly what one would expect from such a *régime*, and all the symptoms vanished rapidly under simple treatment. The clearing out of his loaded bowels, and their regulation, together with a suitable dietary, have put this patient at once into the enjoyment of perfect health. How many thousands of people are going about leading miserable lives, and with their value as citizens diminished, owing to the fraudulent traffic which you so strenuously attack?

There are some evident reasons why I should prefer to conceal my name, and I beg to be allowed to subscribe myself,

Yours truly,

A SENIOR PRACTITIONER.

Liverpool, November 16th, 1909.

### OBITUARY.

THOMAS SECCOMBE, R.N., M.D. ABERD.,  
F.R.C.S. ENG.

WE regret to announce the death of Dr. Thomas Seccombe, one of the oldest surgeons on the retired list of the Royal Navy, who has died at Torquay at the age of 90.

Deceased was educated at the University of Edinburgh. He obtained the qualifications of M.R.C.S. of England in 1843, and the M.D. degree of Aberdeen University in 1865. He entered the Navy in 1845, and

was appointed Staff-Surgeon in 1853, Fleet-Surgeon in 1867, and Deputy Inspector-General of Hospitals and Fleets in 1880, when he retired from the Service. He served as a surgeon on the levies, and was present at nearly every engagement during the Kaffir War in 1851, for which he was awarded a medal. He was in charge of the field hospital at the taking of Rangoon, and took part in many boat expeditions in 1852, being mentioned in despatches and awarded a Burmese medal. In 1864 the Royal College of Surgeons elected him to the Fellowship in recognition of his professional attainments.

### MILITARY & NAVAL MEDICAL NOTES.

**INDIAN MEDICAL SERVICE—SUBORDINATE DEPARTMENT.**—It has been ruled that members of the Hospital Assistant Branch of the Indian Subordinate Medical Department are eligible for the Indian Distinguished Service Medal instituted by Royal Warrant, dated June 25th, 1907. The reason for the issue of such an order is not very clear, for surely it could not have been intended to exclude this deserving and useful class of native public servant from the grant of the medal. He is to be found in the field with medical establishments.

**LEAVE OF MEDICAL OFFICERS.**—It was about this Mr. Ashley interrogated the Secretary of State for War in the House on this subject. He asked whether Mr. Haldane would see that officers of the R.A.M.C. serving in Ireland shall this year receive the full leave to which they are entitled. The Secretary of State for War replied that under normal conditions it will now be possible to give every R.A.M.C. officer serving in Ireland throughout the year full leave, provided that he is willing to take it when the exigencies of the Service permit. Now, this has always been a great grievance, and naturally so—viz., that medical officers never seem able to get their full leave of 60 days. Many have found it very difficult to get even 30 days before embarkation for a foreign service tour. The verbally divisions and districts are under the complement of medical officers supposed to be allotted each, and it is thus the difficulty arises. But who is responsible for this chronic paucity? That is the question. Medical officers are, after all, human, and need the privileges enjoyed by other officers in the from work.

**"DETENTION BARRACKS."**—This is the euphemistic term for "military prisons," recently come into vogue. At the request of the Government of India, the Home authorities have agreed to depute Captain G. Haines, Commandant Detention Barracks, Aldershot, to visit India during this cold season (November to March) to inspect and report on the military prison and detention barrack system prevailing there.

**SOLDIERS' GRAVES.**—Most laudably, the men of the Royal Welsh Fusiliers are, by voluntary subscription, erecting new tombstones over and caring for the graves (where they can be located) of their comrades of the 1st Battalion who died in the last Burmese War in Upper Burma. In one little graveyard alone, Shwabo 40 of the regiment lie buried, while between there and Bhamo lie a number of others.

**SPANISH CASUALTIES IN MOROCCO.**—The Spanish authorities, according to a writer in the *Army and Navy Gazette* of November 20th, have lost in casualties about 3,000 and in sick some 7,000. He criticises unfavourably the administration in the field by stating that "leaves much to be desired." There are no regimental signallers, and the men, though of excellent material, are without training or discipline. The Generals, he says, are not good, and are indifferently backed up by the staff.

## REVIEWS OF BOOKS.

## MIDWIFERY FOR MIDWIVES. (a)

If a nurse wishes to consult a book which will give her a good idea of what a midwife should be, and how she should act, she can do no better than read the "Lectures to Practising Midwives" which Dr. Bennett has written. Each point is clearly defined, and the reader is informed exactly how to conduct her work in language which, though excellent, requires neither a classical scholar nor a public school education to understand. The Rules of the Central Midwives Board are given in full. Good advice is given through the book: "The rectal and vaginal douche apparatus must be kept quite separate"; "swabbing must always be done from before backwards," and other such maxims, which, though trivial, are important, appeal to us. The nurse is advised to conduct a routine examination in every case, and it is well explained how to diagnose abnormalities in order that medical aid may be summoned. The management of the puerperium is described accurately, but we should like to have seen more stress laid on the care which a nurse should take of herself when treating ophthalmia neonatorum. We may say that the personal hygiene for a nurse is excellently given in the commencement of the volume.

The illustrations are not new, but are good reproductions from the works of Jellett and Galabin.

We have no hesitation in strongly recommending the work to those for whom it is intended—namely, practising midwives.

## AURAL SURGERY. (b)

WHILE admitting the excellence of many larger treatises on aural surgery, we are not acquainted with a book which deals with aural operations in so concise and explicit a manner as this recent work by Drs. West and Scott.

The introduction places before the reader the authors' clinical observations on the rotation, caloric, and electrical tests for nystagmus in diseases of the labyrinth, a branch of otology which is yet in its infancy, but which the experience of the past three years has proved to be of fundamental importance in connection with diseases of the internal ear. The writers lay down specific rules for the guidance of the surgeon in deciding for or against operative interference in suppurative otitis media. All the steps of Schwartz's and the radical mastoid operation are minutely and accurately described in a manner which could not fail to be intelligible even to the uninitiated in aural surgery. Particular directions are given to enable the operator to avoid injuring such important structures as the facial nerve, lateral sinus, internal carotid artery, vestibule external semi-circular canal, and temporal lobe of the brain.

Great stress is very rightly laid on what we must consider as one of the primary principles of aural surgery—viz., the necessity for attacking all such complications of suppurative otitis media as labyrinthine suppuration, basal meningitis, sinus thrombosis, and brain abscess of otitic origin through the *fons et origo mali*—the middle ear.

Translabyrinthine combined with lumbar drainage is strongly advocated in the treatment of otitic basal meningitis, and promises to give far more happy results than have hitherto attended the inactivity of former otologists. The assistance which is afforded to the young specialist in the performance of aural operations by means of this excellent book is so complete that it might almost be termed a process of "spoon-feeding" for the embryo otologist.

The appended series of some fifty cases operated on

(a) "Lectures for Practising Midwives." By Victoria E. M. Bennett, M.B., B.S.Lond., &c. With Preface by Mrs. Mary Schallie, M.D., M.S.Lond. Pp. xiv. + 258. Illustrations 41. London: Baillière, Tindall and Cox. 1909. Price 4s. net.  
(b) "The Operation of Aural Surgery." By C. E. West, F.R.C.S., Aural Surgeon to St. Bartholomew's Hospital, and S. R. Scott, M.R., F.R.C.S., Assistant Aural Surgeon to St. Bartholomew's Hospital. Pp. xii and 201, with illustrations and plates. London: H. K. Lewis. Price 7s. 6d. net.

by the authors during the last five years serve as typical illustrations of the text, and form a practical recapitulation in synoptic form of the points in the diagnosis and treatment discussed in the earlier pages of the book.

## ELLIS'S BACTERIOLOGY. (a)

ALTHOUGH this book is evidently intended in the first instance for students of technical and agricultural bacteriology, still it is of sufficient medical interest to demand notice in our pages. After reading the book through carefully and critically, we can only come to one conclusion, namely, that the author not only knows his subject thoroughly, but at the same time is well able to impart his own knowledge to others. Few men have the gift of writing a really interesting book on bacteriology. Dr. Ellis has, and he displays his powers on almost every page. The scheme of the book follows the usual lines. It is the actual treatment of the subject-matter that is novel and refreshing. Bacteriology is not an easy subject to master, but no one can study this book without becoming possessed of a great number of facts which will lay the foundation for wider reading.

The sections dealing with the Nitrogen-Bacteria with Fermentation, and with the Industrial Applications of Fermentative Processes especially form very interesting and helpful reading. The book is well illustrated with over 130 figures in the text. It deserves to have a large sale, and we shall be surprised if a second edition is not very shortly called for. We cordially recommend it as one of the best introductions to the study of bacteriology with which we are acquainted.

## THE POCKET PRESCRIBER. (b)

"THE POCKET PRESCRIBER" is a convenient little book, which is intended to aid students in the art of prescribing. It contains 300 prescriptions, which are arranged alphabetically according to the diseases, over 200 in number, for which they are intended. The objection to this kind of work is obvious, and is well illustrated here by the fact that there is one prescription for enteric fever, and two for gonorrhœa. These may be quite unsuitable for the particular disease during most of its course. On the whole, however, the contents appeal to us on account of the simplicity of the prescriptions, and it will be more acceptable to students for that very reason. It costs one shilling.

## BILHARZIOSIS. (c)

DR. MADDEN is known as a writer of authority on the practical aspect of tropical diseases as seen in Egypt. In the present volume he sums up in brief space most of what is necessary to be known on bilharziosis, avoiding the discussion of controversial points, and approaching the subject from the standpoint of the practical surgeon. Nevertheless, he ignores neither the life-history of the parasite nor the pathological anatomy of the disease. The latter subject is excellently illustrated by photographs from specimens prepared by Professor Symmers, and from life in the author's wards.

Dr. Madden believes that infection by the parasite takes place through the skin, and he shows that 90 per cent. of the patients seen at Cairo come from the perennially irrigated Delta of the Nile. That is to say, the class most affected is that of agricultural labourers, whose work necessitates their standing barefoot in wet mud. The disease is rarely seen among women, except among those who work in the fields with the men. Almost every Egyptian of the agricultural class has been infected, but the disease is quite unknown in the upper classes.

(a) "Outlines of Bacteriology." By David Ellis, Ph.D., D.Sc.Lond., F.R.S.E., Lecturer in Bacteriology and Botany to the Glasgow and West Scotland Technical College, Glasgow. London: Longmans, Green and Co. 1909. 7s. 6d. net.  
(b) "The Pocket Prescriber." By James Burnet, M.A., M.D., M.R.C.P.E., Fellow of the Royal Society of Medicine; Lecturer on Practical Materia Medica and Pharmacy; Registrar to the Royal Hospital for Sick Children, and Physician to the Marshall Street Dispensary, Edinburgh. Edinburgh: John Currie. 1909.  
(c) "Bilharziosis." By F. C. Madden, M.D.Melb., F.R.C.S.Eng. Pp. 78. Illustrated. London: Cassell and Co., Ltd. 1907. Price 7s. 6d. net.

The pathological changes due to the bilharzia are somewhat various, but may be divided into two classes—the hypertrophic and the atrophic. In the former there is a marked proliferation of cells, chiefly the epithelial cells, leading to the formation of papillomatous growths. In the atrophic form the most notable feature is the formation of granulation tissue.

The affections of the urinary, intestinal, female genital, and cutaneous systems, are clearly described by Dr. Madden, while he also gives the appropriate surgical treatment in those cases where treatment is possible.

The book is pleasantly written, in straightforward, personal style, and is the most convenient compendium of the subject that we know.

## LITERARY NOTES.

MR. EDWARD ARNOLD has just published a small book entitled "Elementary Physiology for Teachers and Others," written by Dr. W. B. Drummond, Lecturer to the Edinburgh Provincial Training College. It is intended as an introduction to the subject for teachers in training who are attending lectures on hygiene. The aim of the writer is excellent, but we doubt very much the real value of such a book, especially when we find it stated that "sodium chloride, or common salt, is the most abundant mineral salt" in the body. Again, the illustrations in many instances are not all that might be desired. Altogether, there is a certain amount of scrappiness about the whole book which seriously detracts from its value as an aid to the acquisition of even an elementary knowledge of physiology. The price of the book is 2s. 6d., and its production is decidedly artistic.

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FROM Messrs. E. and S. Livingstone, Edinburgh, comes an old friend in the form of "Deuteronomy Smith" (price 1s. net). This *brochure* narrates in biblical fashion the doings of an Edinburgh medical student. It is full of wholesome humour, and a pleasant hour may be spent in reading the book, which contains a large number of comic illustrations. The present issue is said to be a new edition. At all events the book seems even still to find a ready sale, although many of the persons and positions referred to in its pages have long since ceased to exist.

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WE have been favoured by Mr. H. K. Lewis, of 136 Gower Street, London, with a copy of a Medical Ledger, which has been designed to meet the requirements of the busy practitioner. After a careful examination of the book, we can safely assert that anyone who wants a simple and compact system of bookkeeping will find it here. The plan consists of a combination of Day Book and Ledger, the first part being set out for daily entries, and the second part for monthly and yearly totals. In each case spaces are provided for record of payments. The Ledger has been so arranged that the labour involved in bookkeeping is reduced to a minimum, a consideration that is always of first importance to members of a busy profession. It can be commenced at any date, and is intended to last a year, but in many cases would be serviceable for a longer period. A copy will be forwarded for inspection to intending purchasers on approval, if desired. The book is of handsome quarto size, and is sold for the modest price of 6s. net.

## LABORATORY NOTES.

### DIAMALT AND COD-LIVER OIL.

THE malt extract prepared by the British Diamalt Company (11 and 13 Southwark Street, London) is well known for its purity and its high diastatic power. Taking advantage of the excellent way in which Diamalt blends with a high percentage of cod-liver oil, the company have produced two new preparations containing respectively 15 per cent. and

33½ per cent. of the oil by weight, or 20.3 per cent. and 41.7 per cent. by measure. We have estimated the amount of oil in these two preparations, and find that the statements as to its amount are fully borne out by our analyses, the actual percentages of cod-liver oil found in the samples being 18.2 and 33.8 by weight respectively. It might be thought impossible to conceal so large a proportion of the oil as one-third, but this is not the case, and in neither of the preparations is the taste of cod-liver oil evident to our palate. Both preparations may truthfully be described as "delicious." The pleasant taste combined with a high diastatic power, and a large percentage of oil will certainly render them most acceptable as adjuncts to therapeutics and popular with patients. In addition it may be added that these preparations are free from foreign flavouring substances and preservatives.

### CAPSULES DE BROMIASE (COUTURIEUX).

BROMIASE, a combination of bromide of potassium and levrine extractive, is an interesting product in that it enables us to administer the bromide in large doses for a length of time without the production of the characteristic cutaneous manifestations of "bromism." It has long been recognised that bromide eruptions are most apt to occur in presence of disordered digestion and intestinal fermentation, and it was this knowledge that prompted M. Couturieus, the well-known Paris chemist, to associate the bromide with a powerful gastro-intestinal disinfectant such as levrine extractive, a highly concentrated form of active yeast.

There is ample clinical evidence to justify the claim that the bromide administered in this form is comparatively free from any tendency to cause bromism, and, this being so, the combination will be found of service in all treatments into which bromine enters.

Bromiase is put up in sugar-coated ovoid tablets containing 8 gr., which are easy to swallow, and are quite free from taste.

### CAPSULES DE IODASE (COUTURIEUX).

IODASE is a combination of iodide of potassium and levrine extractive, and the action of the latter on the digestive tract is such as to avert the phenomena of iodism in the same way as it does in respect of bromine. Like its congener bromiase, it is put up in the form of sugar-coated ovoid tablets, each containing 8 gr. of potassium iodide. The London agents for both preparations are Messrs. Roberts and Co., New Bond Street.

## NEW INSTRUMENTS.

### THE SHAW INHALER.

WE have been favoured by Messrs. Macpherson and Co., of 89 Farringdon Street, London, with a sample inhaler jug which seems to be excellent in all details. Manufactured of thin porcelain, it is so constructed as to fit the face accurately. It is graduated both inside and outside with guiding lines so that the temperature may be regulated by adding more or less cold water to the standard amount of boiling water placed in the bottom of the vessel. It is a workmanlike little appliance, and is sure to be widely used if only its virtues become known to medical men and others who are interested in the scientific and practical equipment of the sick room.

SIR WATSON CHEYNE, BART., F.R.S., F.R.C.S., and Dr. Purves Stewart have been appointed Consulting Surgeon and Consulting Physician respectively to the Central London Throat and Ear Hospital.

THE Unionists of the Edinburgh and St. Andrew's Universities have secured a suitable candidate in the person of Sir Robert Finlay, K.C., G.C.M.G. Sir Robert represented the Inverness Burghs from 1885 to 1892, and again from 1895 to 1906. As a law officer of the Crown, he has held the posts of Solicitor-General and Attorney-General.

# SUMMARY OF RECENT MEDICAL LITERATURE, ENGLISH AND FOREIGN.

*Specially compiled for THE MEDICAL PRESS AND CIRCULAR.*

[SPECIALLY REPORTED FOR THIS JOURNAL.]

**A Critical Inquiry into the Cause of Internal Rotation of the Foetal Head.**—Paramore (*Journ. Obst. and Gyn. Brit. Emp.*, XVI., 4), after criticising the views of other writers, gives his own theory. In cases in which flexion is good, the point of impact of the advancing pole of the foetal head (vertex) with the pelvic floor is in the region of the coccyx. It is against this part of the pelvic floor that the vertex of a well-flexed head, be the forehead posterior or anterior, first impinges, and which first resists the head's further advance. In consequence of the continued downward foetal thrust, descent of the pelvic floor begins at this region of primary impaction, the coccyx becomes more sloped downwards and forwards, and forms an inclined plane, down which the vertex is pressed. When the forehead is behind, it is easy to understand how it falls into line behind the advancing vertex, and comes to occupy the middle line posteriorly, for the transverse diameters of the pelvis become diminished, whilst the antero-posterior becomes increased as the outlet is reached. When the forehead is anterior, the mechanism of its rotation posteriorly is more difficult. In these cases in which the head is well flexed, just as when the forehead is posterior, the vertex first meets the pelvic floor in the region of the coccyx, which, as before, becomes inclined downwards and forwards, and forms a plane along and down which the vertex is pressed. The vertex, therefore, is forced to occupy a lower yet more anterior position—that is, it is forced to approach the symphysis. Owing to the direction of the coccyx being continued by the ano-coccygeal raphe, further descent of the vertex can only occur in conjunction with its further projection forwards towards the symphysis. This can readily occur in occipito-anterior positions, as extension can and does now begin. But in occipito-posterior positions such movement is resisted by the chin already being in close contact with the chest, and thus the tendency for the vertex to advance towards the pubic arch compresses the forehead in a direction obliquely upwards, with a force proportionate to the force of descent, against the antero-lateral wall to which it was opposed before the movement began. Descent of the forehead is prevented by the tendency to advance of the vertex, nor can it ascend owing to the chest of the foetus being thrust down with the same force against the chin of the child. Since the vertex tends to descend, and cannot do so if the forehead maintains its place, and since the forehead cannot move upwards owing to the chest and chin, either extensive moulding must occur or the forehead must move along the line of the resultant of the two forces acting upon it, and since the transverse diameter of the pelvis is greater than the antero-posterior at the level at which the forehead lies, it follows the line of least resistance, and glides in the direction of the resultant of the two forces into the transverse diameter. The movement of the forehead into the transverse diameter of the pelvis allows the cranial axial line, about which internal rotation takes place, to advance towards the symphysis, for the forehead occupies an eccentric position in relation to it—that is to say, the distance between the forehead and the cranial axial line is greater than the distance between the side of the head and the same line. This advance of the upper part of the cranial axial line and the lower part being forced forwards by the tension and inclination of the pelvic floor, determines a lesser resistance between the side of the foetal head and the sacrum than exists between the forehead and the lateral pelvic wall; when the head has descended and the forehead comes into conjunction with a diminishing transverse diameter and an increasing antero-posterior diameter, the forehead tends to follow the line of least resistance and continues the rotatory

movement, so that eventually it rotates into the hollow of the sacrum, whilst simultaneously the occiput turns to the front. When, however, the head is not well flexed, the same mechanism cannot occur. The forehead being much lower in the pelvis than when flexion is good, the occiput must be situated more posteriorly in the oblique diameter. As the foetus descends, the anterior inter-parietal region cannot so easily cause descent of the pelvic floor, because it is more obtuse than the vertex, and its descent is resisted by a correspondingly large area. Nor can the lateral movement of the forehead occur, because, from its lying at a lower level, it has to rotate into a smaller transverse diameter than when situated high up, as in the case of good flexion, and, further, because the diameters of the foetal head concerned in such rotation are the bi-parietal  $9\frac{1}{2}$  cm. as before, but the sub-occipreg.  $9\frac{1}{2}$  cm. is replaced by the occ.-frontal 12 cm. Thus the change from occipito-posterior to the occipito-anterior results from the forehead being rotated backwards more than the occiput being rotated forwards. It depends on the flexion of the head bringing the vertex against the pelvic floor while the forehead is still at a high level in the pelvis, and still in relation to the large transverse diameters, and it further depends on the screw-like character of the pelvis, by which the greater diameter at the brim is transverse and gradually changes so that at the outlet it has become antero-posterior. F.

**Vaginal Cæsarean Section, with Report of Four Cases.**—Spriggs (*Amer. Journ. of Obst.*, LX., 4). Eclampsia has been, and probably always will be, the chief indication for this operation. Authorities are agreed to-day that, given a case with eclampsia, the safest thing for the woman and child is immediate delivery. Everyone realises the danger of sepsis from manual dilatation. In vaginal section the vagina can be rendered as aseptic as for any vaginal operation, so that the danger of sepsis is reduced when this operation is performed. In a case of placenta prævia, delivery can be effected more rapidly by this method than by either manual or instrumental dilatation, because the major part of the operation is completed before the cervix or uterus is opened, and then it is only a matter of a moment to make the incision up into the anterior wall of the uterus and manually separate and extract the placenta and the child by version or forceps. The dangers of the operation are the possible injury to the bladder and opening into the peritoneal cavity when a posterior incision is made. The operation and delivery can be done in from 10 to 15 minutes, and the repair in from 20 to 40 minutes, with a minimum amount of shock to the patient. The author describes the *technique* followed in his cases, and gives a short note of each case. F.

**Cervical Cæsarean Section.**—Lewis (*Amer. Journ. of Obst.*, LX., 4), after an extensive survey of the literature, remarks that he has collected 102 cases done since, and including Frank's first one in 1906. Of these women, 9 died, a maternal mortality of 8.8 per cent.; of these 104 children, 9 died, an infantile mortality of 8.6 per cent. In the majority of cases the main indication of the cervical operation instead of the ordinary Cæsarean section was the suspicion of infection. The main question as to the value of this operation depends upon how likely we are to have infection following non-aseptic conditions before entrance into hospital. Since most of the operators open the peritoneum and close it with permanent or temporary sutures before opening the uterus, there is here a large chance of infecting that cavity when the infected contents of the uterus are poured into the

wound. Close examination of the results does not make them appear as brilliant as the enthusiastic advocates of cervical Cæsarean section maintain. Fourteen of the cases were operated upon transperitoneally, and were therefore supposed to be aseptic. Forty were probably aseptic before operation. In such cases ordinary Cæsarean section has a mortality of only 4 per cent. The peritoneum was cut or torn accidentally in 8 cases. The bladder was injured in 3 cases; 42 of the cases may have been infected beforehand because of prolonged labour and examinations of uncertain cleanliness, early rupture of the membranes, or fœtor of the amniotic fluid. In only eight cases was there surely infection before operation. There was severe infection after labour, causing death in 5 cases, not causing death in 3, and less serious, mostly circumscribed, in 6—a total of only 14 cases which gave evidence after operation that the fear of infection was well founded. Cervical Cæsarean section is a more difficult operation than the other form; it requires deep dissection into extensive connective tissue spaces, and admittedly, in the probable presence of infection, it often involves considerable difficulty in extraction of the child, and leaves the uterus in an abnormally fixed position. For clean cases it cannot replace the ordinary operation, and for cases of possible previous infection it offers no better chances than the classical operation, with careful damming of the peritoneal cavity against the contents of the uterus and tight suturing of the uterine walls.

**Epithelioma of the Vulva.**—Ballock (*Amer. Journ. of Obst.*, LX., 4) gives the history and describes a case of this, and draws the following conclusions:—The predominating type is the squamous-celled. In the majority of cases the exact starting-point cannot be determined; it may develop in the labium majus or minus, or the clitoris, probably in the order named. The ulceration is peculiar in its mode of extension. Starting in the labium, it will spread in an upward direction and involve the clitoris and prepuce, the vestibule and the opposite labium; occasionally the mons veneris is involved. The spread is never towards the vagina, and very rarely to the skin of the thigh or abdomen. Irritating discharges from the vagina or uterus are liable to cause cancer. Pruritus vulvæ should be cured, as the irritation incident to this disease may cause cancer of the vulva. The earlier and more thorough the operation the better the prognosis as to complete eradication. Even if the disease involves only one side, the glands on both sides should be removed, and an effort made to determine the state of the pelvic glands.

## MEDICAL NEWS IN BRIEF.

### The Seventeenth International Congress of Medicine—London, 1913.

A MEETING of the National Committee for Great Britain and Ireland of the International Congress of Medicine was held at the Rooms of the Medical Society of London, on Thursday last, November 25th, Dr. F. W. Pavy, F.R.S., in the Chair.

Mr. D'Arcy Power read a report on the Sixteenth Congress at Budapest, in which it was shown that the British contingent numbered 94, and that the meeting was most successful in every way. At the Congress it was decided to appoint a permanent Committee consisting of the Presidents and Hon. Secretaries and some members of the various National Committees, with a president and a paid secretary. Dr. Pavy was appointed the first President of this National Committee.

Dr. Pavy then notified to the meeting the acceptance at the Budapest meeting of the invitation of the National Committee of Great Britain and Ireland, with the approval of His Majesty's Government, for the next Congress, in 1913, to be held in London.

Arrangements were then made for forming a General Committee to undertake the organisation required for the London meeting, and after passing a vote of

thanks to the Medical Society for the use of their rooms, the meeting of the National Committee adjourned.

The Hon. Secretaries, Mr. D'Arcy Power and Dr. Clive Riviere, would be glad to receive the names of any who are interested in the forthcoming Congress to be held in London.

### Cancer Research.

LORD CHEYLESMORE, in answer to questions at the Court of Governors of the Middlesex Hospital, held on the 25th ult., makes it clear how the quarter of a million sterling left by the late Mr. Harry Barnato will be spent. The money was left to form some charity in the nature of a hospital. The trustees have decided to found with the money a cancer institution, which, while distinct and self-supporting, will be administered by the Weekly Board and secretarial staff of the Middlesex Hospital. The funds of the hospital will, however, be kept separate from those of the bequest. The new cancer buildings are to be built close to the hospital, and besides laboratories will house patients, and there will be sufficient money to increase the number of those who are engaged in the research work. But it is to be clearly understood that the support of the present cancer department of the hospital will not be borne by the funds of the new institution.

### The Irish Medical Schools' and Graduates' Association.

THIS Association held their autumn dinner at the Hotel Cecil, on November 24th. The chair was taken by Dr. Mouillot (the President), and some two hundred were present. The usual toasts were proposed by the President. Dr. McManus gave "The Guests," which was responded to by Lord MacDonnell, K.C.V.O. The speech for the health of "Our Defenders" was made by Dr. J. Gubbins Fitzgerald, and was replied to by Sir Alfred Keogh, K.C.B., the President-elect of the Association. An interesting presentation was then made by the President, who, on behalf of the Society and himself, gave an illuminated address to the retiring Secretary, Dr. T. Hobbs Crampton, for his services to the Association during the last seven years. Sir Francis Fleming, K.C.M.G., delivered the introductory remarks to the toast of "The Association." The response was made by the President, who, in the course of his comments, said the objects of the Association were to have a meeting-place for the Irish graduates, and to hold a watching brief on their behalf.

The President's health was called for by Dr. Harry Campbell.

Songs and yarns between the toasts made a very enjoyable evening.

Among those present were Sir Charles Cuffe, K.C.B., Dr. Cambell Boyd (Hon. Secretary), Dr. Palisson Armstrong, T. J. Crean, V.C., W. P. Kennedy, H. Pollen.

### Royal College of Surgeons in Ireland—New Fellowship Examinations.

THE following regulations were adopted on November 18th:—

The Examination for the Fellowship is divided into two parts, viz.:—The Primary and the Final.

The subjects of the Primary Examination are—Anatomy, including Dissections, Physiology, and Histology. The Examination is partly written, partly *viva voce*, and partly practical. Candidates must pass in all the subjects at one Examination.

The subjects of the Final Examination are—Surgery, including Surgical Anatomy and Pathology. The Examination is partly written, and partly *viva voce*, and includes the examination of patients, and the performance of operations on the dead body. Candidates must pass in all the subjects at one Examination.

### King's Bench Division.

BEFORE Mr. Justice Channell and a common jury the hearing was continued of the action by Miss Mary Jane Stephens, residing at Crouch End, against the Dowsing Radiant Heat Company, Limited, for damages for personal injuries.

The plaintiff sustained burns, and it was alleged that this was due to the high frequency electric treatment which she underwent at the defendants' premises. The defendants denied negligence.

The plaintiff underwent the treatment when she was suffering from indigestion.

Dr. C. H. Langford said the plaintiff consulted him with reference to the high-frequency treatment, and he advised her to undergo it. The treatment, if properly administered, was recommended by the medical profession. The wounds on the legs were consistent with electrical burns.

Mr. Norman Craig said he did not contest that the wounds were caused by the treatment.

Cross-examined, the witness said that the high frequency treatment was administered in various parts of the country and in London.

Dr. Lewis Jones, of Harley Street and of St. Bartholomew's Hospital, said he had made a special study of medical electricity. In his opinion high-frequency required special skilled administration. He found that Miss Stephens' injury was caused by serious sparking. He found that the braid on the plaintiff's skirt had metal threads on it, and the contact could have been set up in that way and the burns caused in that way.

Cross-examined, the witness said the system was sometimes applied by nurses, but his view was that it should be only administered by duly qualified medical men. He did not think the accident could have occurred if there had been no tinsel braid on the skirt.

The witness added there must be contact with earth or the pole of the apparatus before danger arose.

For the defence Mr. Norman Craig contended that there was no case of negligence, as it was admitted that a state of things arose which had not come within previous experience.

Nurse Crossfield gave evidence, and denied that the plaintiff complained of pain during the time she was submitted to the treatment.

The jury, after considering for an hour and a half, returned a verdict for the plaintiff with £60 damages. Judgment was entered with costs.

His lordship said that there was nothing to complain of with regard to the defendants, the occurrence being more of an accident than anything else.

#### Dublin University Biological Examination.

THE opening meeting of the 35th Session of the Dublin University Biological Association took place on Saturday night, 27th ult., in the Debating Hall, Graduates' Memorial Buildings, T.C.D. Dr. T. G. Moorhead, outgoing president, occupied the chair.

The President presented to Mr. A. F. B. Shaw (Sen. Mod.), B.A., the Medal of the Association, awarded for his paper, "Some Notes on Anthropology," and to Mr. J. M. S. Gericke the Purser Medal.

Professor W. H. Thompson, the newly-elected President, read his inaugural address, the subject of which was "The Physiology of the Pylorus."

The address was discussed by Professor Halliburton, F.R.S., Mr. A. B. Mitchell, Principal Mettam, and Mr. William Taylor.

#### Medical Sickness and Accident Society.

At the usual monthly meeting of the Executive Committee of this Society, Dr. de Havilland-Hall in the Chair, the Committee passed a resolution, expressing to Mrs. Clutton, widow of the late Mr. H. H. Clutton, F.R.C.S., for many years one of the Treasurers of the Society, their appreciation of the loss they have sustained by his death, and their sympathy with her in her bereavement.

A more than usually long list of sickness claims was considered, but although numerous, the claims are for the most part of a light nature and of short duration.

#### Scientific Investigation of Children's Development.

THOSE of our readers who are fathers of families may feel inclined to respond to the appeal for help just issued by the Child Study Society. The Society in its efforts to advance knowledge of child life, has been looking for scientific aid, and has now succeeded

in gaining the co-operation of Professor Karl Pearson. He has drafted a schedule for studying the factors influencing the life of the child. It is desired that the schedule should be filled in by heads of families, especially of the upper, middle, or professional classes. The number of the family need not be large, but particulars of mother and father, and at least two children are required. Unless the number of schedules sent in is large, it will not make worth while the subsequent investigation by Professor Pearson. The appeal is especially made to members of the learned societies, and to professional men and women, who should be interested in promoting a more scientific treatment of child life. To supply the particulars asked for will call for two or three hours' work. The schedules can be had from the Society's office, 90 Buckingham Palace Road, S.W.

#### Swansea Workhouse Operating Theatre.

At a recent meeting of the Building Committee of the Swansea Board of Guardians, a letter was read from the Local Government Board suggesting that the cost of erecting an operating theatre at the workhouse should be reduced from £1,017 to £600. Mr. C. T. Ruthen, architect, in response to a request, attended and said it would be impossible to reduce the cost in view of the conditions imposed by the Local Government Board and the installation of a steriliser and special electric lighting. It was resolved to write the Local Government Board asking them how they arrived at their figures.

#### Conviction of a Nottingham Nurse.

At the recent Nottingham and Notts Assizes, Elizabeth Gamble, described as a nurse, was convicted of administering a certain drug for the procuring of abortion. A murder charge was withdrawn, and the prisoner was sentenced to three years' penal servitude. The police gave evidence to the effect that the prisoner had been carrying on similar practices for the past twenty years, and that a daughter had died in her house under suspicious circumstances.

#### Society of Apothecaries of London.

THE Diploma of the Society has been granted to the following candidate, entitling him to practise Medicine, Surgery, and Midwifery.—T. A. F. Tyrrell.

#### Trinity College, Dublin.

THE following candidates passed the Final Medical Examination, Part II., Surgery, at Michaelmas Term, 1909:—Hilgard Müller and John W. Flood (passed on high marks), Beatrice M. Hamilton, Peter H. Lemass (æq.), Adams A. M'Connell, Robert E. Lee, Joseph E. N. Ryan.

Part II.—Medicine.—Adams Andrew M'Connell and Brindley H. Moore (passed on high marks), Peter H. Lemass, William R. Watson (æq.), Louis Trichard, Edwin B. Bate, Robert E. Lee, James D. Murphy, Hugh S. Metcalf, Charles H. Denham, William H. Hart.

Licence in Dental Science.—Arthur A. Campbell.

#### Royal College of Surgeons in Ireland.

THE following candidates passed the Primary part of the Fellowship Examination:—Arthur Chance, junr., O. J. Hanlon, H. J. Smyly.

The following candidates, having passed the necessary examinations, have been admitted Fellows of the College:—D. Adams, L.R.C.S.I., etc.; W. V. Copinger, B.Ch., etc., Dub. Univ., Captain I.M.S.; M. G. Dobbryn, L.R.C.S.I., etc.; J. B. Dordi, L.M. and S., Bombay Univ.; M. W. Falkner, L.R.C.S.I., etc., Captain R.A.M.C.; J. K. Freyer, L.R.C.S.I., etc., Orange, New South Wales; C. Greer, L.R.C.S.I., Melbourne; H. W. A. Kay, L.R.C.S.I., Pretoria; Miss K. F. Lynn, B.Ch., etc., Royal Univ.; F. McKee, B.Ch., etc., Royal Univ.; J. B. Moore, B.Ch., etc., Royal Univ.; C. E. Murphy, L.R.C.S.I., etc.; T. North, B.Ch., etc., Dublin; T. T. O'Farrell, L.R.C.S.I., etc.; H. R. C. Rutherford, L.R.C.S.I., etc.; W. S. Sharpe, M.R.C.S.Eng., etc., Major R.A.M.C.; C. Sullivan, L.R.C.S.I.; and W. R. Wilson, L.R.C.S.I.



## NOTICES TO CORRESPONDENTS, &c.

CORRESPONDENTS requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

### SUBSCRIPTIONS.

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ORIGINAL ARTICLES OR LETTERS intended for publication should be written on one side of the paper only and must be authenticated with the name and address of the writer, not necessarily for publication but as evidence of identity.

J. P. TAYLOR.—Your communication came to hand as we were "at press."

LEX.—The question whether a workman should undergo an operation when he has received some injury at his occupation which incapacitates him or not, really depends on (1) The proposed operation, if of a simple character; (2) the patient's health, and (3) if the operation will terminate his incapacity. If so, then the courts will usually hold that the true cause of the incapacity to work is the refusal to undergo the operation, and not the primary injury nor the resulting injury and as a consequence, they suspend the compensation payments until after the operation has been undergone. Removal of a sequestrum of dead bone from the big toe is the sort of operation that would be enforced by the above procedure.

E. R. C.—Your paper is marked for early insertion. COLONIAL.—There is no nomination wanted for the Colonial Medical Service. The usual method of obtaining appointments is to write to the Under-Secretary of State for the Colonies, Downing Street, London, S.W., and ask for a form of application for the Colonial Medical Service. The Colonial Office list, gives as complete a collection of the British Colonial Possessions as there probably is in print.

DR. H. W. G. M.—Proofs of your paper will be sent you during the present week.

HÆMORRHOIDS.—Aloes is a valuable purgative scientifically used. When taken continuously in form of quack nostrums it often gives rise to piles. The victims then very often seek relief from "pile cures," most of which are coarse swindles.

## Meetings of the Societies, Lectures, &c.

WEDNESDAY, DECEMBER 1ST.

MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22 Chenies Street, W.C.).—4 p.m.: Mr. L. Cheatle: Clinique (Surgical). 5.15 p.m.: Lecture: Mr. C. Ryall: Appendicitis in the Female. NORTH-EAST LONDON POST-GRADUATE COLLEGE (Prince of Wales's General Hospital, Tottenham, N.).—2.30 p.m.: Medical Out-patient (Dr. T. R. Whipple); Skin (Dr. G. N. Meachen); Eye (Mr. R. P. Brooks). 3 p.m.: X-Rays (Dr. H. Pirie).

THURSDAY, DECEMBER 2ND.

ROYAL SOCIETY (20 Hanover Square, W.).—8.15 p.m.: Ordinary General Meeting: Prof. A. W. Porter: Some Effects of Electrical Discharges on Photographic Plates.

NORTH-EAST LONDON CLINICAL SOCIETY (Prince of Wales's Hospital, Tottenham, N.).—4.15 p.m.: Clinical Meeting.

MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22 Chenies Street, W.C.).—4 p.m.: Sir Jonathan Hutchinson: Clinique (Surgical). 5.15 p.m. Lecture: Dr. D. Drummond (Newcastle): The Causes and Treatment of Indigestion.

NORTH-EAST LONDON POST-GRADUATE COLLEGE (Prince of Wales's General Hospital, Tottenham, N.).—2.30 p.m.: Gynaecological Operations (Dr. A. E. Giles). Clinics: Medical Out-patient (Dr. A. J. Whiting); Surgical (Mr. Carson). 3 p.m.: Medical In-patient (Dr. G. P. Chappell).

HOSPITAL FOR SICK CHILDREN (UNIVERSITY OF LONDON) (Great Ormond Street, W.C.).—4 p.m.: Lecture (Medical): Dr. Poynton: Recurrent Periodic Jaundice.

CENTRAL LONDON THROAT AND EAR HOSPITAL (Gray's Inn Road, W.C.).—4.30 p.m.: Clinical Lecture: Mr. Stuart-Low: Cancer of the Throat—its Prevention and Treatment.

ST. JOHN'S HOSPITAL FOR DISEASES OF THE SKIN (Leicester Square, W.C.).—6 p.m.: Chesterfield Lecture: Baldness—its Causes and Treatment.

FRIDAY, DECEMBER 3RD.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY (West London Hospital).—8.30 p.m.: Paper: Dr. Hugh M. Bayly: Laboratory Diagnosis of Syphilis. Discussion by Col. Lambkin, R.A.M.C., Captain Harrison, R.A.M.C., D. J. Ernest-Lane, and others.

CENTRAL LONDON THROAT AND EAR HOSPITAL (Gray's Inn Road, W.C.).—3.45 p.m.: Lecture: Mr. W. Wallis: Mouth and Teeth.

NORTH-EAST LONDON POST-GRADUATE COLLEGE (Prince of Wales's General Hospital, Tottenham, N.).—10 a.m.: Clinic: Surgical Out-patient (Mr. H. Evans). 2.30 p.m.: Operations.

Clinics: Medical Out-patient (Dr. A. G. Auld); Eye (Mr. R. P. Brooks). 3 p.m.: Medical In-patient (Dr. R. M. Leslie).

MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22 Chenies Street, W.C.).—4 p.m.: Mr. R. E. Bickerton: Clinique (Eye).

ROYAL SOCIETY OF MEDICINE (LARYNGOLOGICAL SECTION) (20 Hanover Square, W.).—5 p.m.: Cases and Specimens by Dr. Dundas Grant, Dr. W. H. Kelson, Mr. H. Betham Robinson, Dr. Scanes-Spicer.

ROYAL SOCIETY OF MEDICINE (SECTION OF ANÆSTHETICS) (20 Hanover Square, W.).—8.30 p.m.: Paper: Mr. Bellamy Gardner and Dr. Salusbury Trevor: Lymphatism, with specimens and lantern illustrations.

SATURDAY, DECEMBER 4TH.

ROYAL SOCIETY OF MEDICINE (OTOLOGICAL SECTION) (20 Hanover Square, W.).—10 a.m.: Cases shown by Dr. Edward Law, Mr. Herbert Tilley, Mr. W. Milligan, Mr. Richard Lake, Dr. Albert Gray, Mr. Sydney Scott.

## Appointments.

CHEYNE, Sir Watson, Bart., C.B., F.R.S. Consulting Surgeon to the Central London Throat and Ear Hospital.

KIDD, F. S., M.B., B.C.Cantab., F.R.C.S. Eng. Assistant Demonstrator of Anatomy at the London Hospital Medical College.

LINELL, J. W., M.B.Cantab., Resident Medical Officer at the Mount Vernon Hospital, Hampstead, N.W.

MILLER, ARTHUR H., M.B.Cantab., M.R.C.P.Lond., Physician to Out-patients at the City of London Hospital for Diseases of the Chest.

QUICK, E. J. J., M.R.C.S., L.R.P.C.Lond., House Anæsthetist to the Royal Dental Hospital.

SLIGH, H. P., M.B., Ch.B.Aberd., Medical Officer of Health to the Samford Rural District Council, Suffolk.

THOMPSON, Sir William J., M.D.Dub., Registrar-General for Ireland.

WALLACE JOHN THOMPSON, M.B., B.Ch., B.A.O., R.U.I., Surgeon to the great Western Railway Provident Society at Bristol.

PRICE, FREDERICK W., M.D., M.R.C.P., Physician to the Great Northern Central Hospital, London.

## Vacancies.

Suffolk District Asylum, Melton.—Second Assistant Medical Officer. Salary £160, with board, furnished apartments, attendance, and laundry. Applications to the Medical Superintendent.

Royal London Ophthalmic Hospital (Moorfields Eye Hospital), City Road, E.C.—Curator and Librarian. Salary £120 a year, with lunch in the Hospital. Applications, to the Secretary.

Cancer Hospital (Free) Fulham Road, London, S.W.—Physiological Chemist to the Cancer Institute. Salary £350 per annum. Applications to the Secretary.

Kent County Asylum, Chatham.—Third Assistant Medical Officer. Salary £145 per annum, with board, quarters, attendance, and washing. Applications to Medical Superintendent, Chatham, near Canterbury.

City and County of Nottingham.—Resident Assistant Medical Officer. Salary £130 per annum, with apartments, board, washing, and attendance. Applications to G. Muncaster-Howard, Clerk to the Board.

## Births.

BRADDON.—On Nov. 26, at 283 London Road, Thornton Heath, Surrey, the wife of William V. Braddon, M.B., B.C.Cantab., of a daughter.

BURKE.—On Nov. 27th, at Devonport, the wife of Capt. B. B. Burke, R.A.M.C., of a daughter.

FOSTER.—On Nov. 24th, at 181 Banbury Road, Oxford, the wife of E. C. Foster, M.B.O.S., L.R.C.P., of a daughter.

SELOUS.—On Nov. 26th, at "Agre," New Milton, Hants, the wife of Cuthbert F. Selous, M.B., of a son.

## Marriages.

BONSEY-DYMOCK.—On Nov. 25th, at St. Peter's, Bedford, Edward, son of the late W. H. Bonsey, of Slough, Bucks, to Edina, Florence, youngest daughter of the late Archibald Dymock, M.D., M.R.C.P., J.P., of Louth, Lincolnshire.

HAILESTONE-CLARANCE.—On Nov. 25th, at Jinja, Uganda Protectorate, John Edward Hailestone, M.R.C.S., L.R.C.P., Colonial Medical Service, eldest son of Commander Walter Hailestone, R.N., of Cheltenham to Harriet Emily (Birdie) Clarence, eldest daughter of Charles Clarence, of Saffron Walden. (By cable.)

MAIN-MIDDLETON.—On Nov. 24th, at Holy Trinity Church, Sloane Street, London, S.W., Dingwell Main, F.R.C.P.E. of Hangchow, to Florence, youngest daughter of the late Clement Alexander Middleton, Bench of Gray's Inn, London.

## Deaths.

CLARK.—On Nov. 28th, after an operation, Mildred Mary Christie, the loved wife of Percy J. Clark, M.R.C.S., L.S.A., of 2 Spital Square, Bishopsgate, London, aged 43.

HINE.—On Nov. 20th, at Hillbutts, Wimborne, Samuel Daniel Hine, M.R.C.S., third son of the late Samuel Daniel Hine, of Ashill, Somerset, in his 76th year.

STOCKS.—On Nov. 27th, suddenly, at Walton, the result of an accident, Frederick Stocks, M.R.C.S.E., of 421 Wandsworth Road, London, S.W., aged 65.

# THE MEDICAL PRESS AND CIRCULAR.

"SALUS POPULI SUPREMA LEX."

VOL. CXXXIX.

WEDNESDAY, DECEMBER 8, 1909.

No. 23.

## NOTES AND COMMENTS.

**Is  
King's Lynn  
Asleep?**

IN the year of grace 1875, an Act for consolidating and amending the Acts relating to public health in England was enacted by the Queen's most excellent Majesty, by and with the advice and consent of the Lords and Commons in Parliament assembled. By Section 80 of this Act, "Every local authority shall from time to time make bye-laws" about common lodging-houses, yet thirty-four years later, in 1909, King's Lynn, a town of 21,000 inhabitants, in the county of Norfolk, and a seaport to boot, has no such bye-laws. The result, as reported by Dr. F. St. George Mivart, to the Local Government Board, is serious, apart from one of the instances cited, where a room reserved for two couples, and so occupied the night before Dr. Mivart's call, had no screen or curtain. The question that will occur to every plain man is, why King's Lynn has been permitted to neglect its statutory duties as regards lodging-houses. What have the Local Government Board to say upon the point? But the sanitary dispositions of this sleepy town are hopelessly at fault outside as well as inside the lodging-houses, as is abundantly shown in other parts of the official report.

**The Drainage  
of  
the Town.**

A WATER-CARRIAGE system is in vogue in the populous quarters, but its effluent is not carried clear of the town. In the neighbourhood of the Ouse and its creeks numerous water-closets discharge upon the mud-banks. The sewers themselves open into the same waterways, which, by-the-by, extend a considerable distance into the town. The consequence is that the banks are foul, and decomposing matter floats up and down with the tide. Naturally, complaints of offensive odours are common, and they justify, without going further, the recommendation that the question of culverting the Purfleet sewer outfall should have early attention, and that steps should be taken to prevent the discharge of water-closet drains upon the foreshore and mud-banks. The town refuse is disposed of at a tip on the southern outskirts of the place, where the contents of the earth-closet pans are also deposited. The mound at the foot of this tip is kept down by a sort of Chinese practice, as anyone may remove refuse for garden purposes upon applying to the surveyor for permission to do so.

**Housing  
at  
King's Lynn.**

A DESCRIPTION of the housing of this Rip Van Winkle town, written some seventeen years ago, with one exception, applies at the present moment. Many of the streets are narrow, and in certain quarters there are courts

or yards thickly populated and entered by narrow passages. Many are surrounded by high walls, to the exclusion of sun and air. The houses themselves are often in bad repair and overcrowded. The exception—the only redeeming feature—is the paving of the yards, during the last few years, thanks to the efforts made by the Inspector of nuisances. As, however, the "yards" are only about five feet wide (the windows of a house looking on to a wall five feet away), the significance of the remarks relating to the exclusion of sunlight and the prevention of the free circulation of air wants no emphasis, and the recommendation of Dr. Mivart that the Town Council should give early, careful and systematic attention to the housing question in the borough will be endorsed by all fair-minded people. Some decisive action is clearly needed on the part either of the local or the central authority, or of both.

**Enteric  
at  
King's Lynn.**

THE sequel of this sanitary slothfulness is written large in the report to the Local Government Board and in the statistics of the town. During the last ten years 278 cases of enteric fever have been notified, with 36 deaths. This, of course, is merely the natural corollary to the foregoing series of facts. What, however, shall be said of the cases of enteric contracted at King's Lynn and carried elsewhere, both by land and sea? Such a Town Council as that of Lynn has a grave responsibility, for it keeps going what is nothing more or less than an infective plague spot within our shores, pernicious alike to the inhabitants of the town and the outside world. Medical officers of health, no matter how capable, energetic and tactful, will find it a herculean task to cope with such a conglomeration of evils, and to avoid being at loggerheads with the Sanitary Committee, for, with this last evil, all hope of getting sanitation carried on must, as the law is at present, be very slow.

**School  
Infection.**

THE question of school infection, which has been lately raised at Bristol and elsewhere, demands firm yet cautious handling. Broadly speaking, the spread of infection amongst a juvenile population is a risk that, however much it may be modified by forethought, must be regarded as inevitable. The systematic medical inspection of State schools is undoubtedly the greatest step hitherto taken towards the limitation of the spread of infective maladies. In this way many a doubtful scarlatinal throat, many a scabies case, and many a verminous head, may be excluded from the school environment. It is difficult, however, to imagine any system that would enable

the authorities to recognise and deal similarly with measles and whooping-cough. There can be no shadow of doubt that diphtheria has increased concurrently and progressively with the growth of compulsory education in the United Kingdom. Nor is it open to serious contradiction that many outbreaks of measles, mumps, and other acute specific infections have taken place in schools. Under these circumstances, there is much to be said in favour of the systematic disinfection of schoolrooms, the dust of which has been repeatedly shown to contain the organisms of tuberculosis and other pathogenic microbes. In places where it is not possible to adopt the counsel of perfection of the open-air school, there would be no great difficulty in cleansing the class-rooms at frequent intervals by the scientific application of antiseptics of recognised value.

## LEADING ARTICLES.

### DAMAGES FOR SCHOOL TYPHOID.

ALTHOUGH enteric fever is, happily, a diminishing disease, there yet remains a great amount of labour and investigation before sanitary science can hope to be within view of its final extinction. In spite of all that has been discovered and of all advances in practical sanitation, it must be confessed that the origin of a considerable proportion of cases of this infection cannot be identified. As time elapses, there can be little reasonable doubt that medical science will hold the whole problem of enteric fever, from the preventive as well as the ætiological and the curative standpoints, in the hollow of its hand. One has only to look back upon the advances that have been made within a comparatively few years in our own knowledge of facts regarding this baffling and dangerous malady. The recognition of the agency of water and milk in its transmission, for instance, was followed by the identification of its specific pathogenic micro-organisms, the discovery of the agglutination tests, surgical operation for perforation, preventive serum inoculation, the transmission of the virus by flies, by uncooked vegetables, and by shell-fish, and the retention of the bacilli by persons, acting as "carriers" long after recovery from an attack. In view of solid progress of this kind, it comes somewhat in the nature of a surprise to find legal proceedings being taken against the proprietors of a dairy farm for having infected certain of their customers through the milk supply. The facts of the case are sad enough in their disclosure of preventable distress and death that is inseparable from the tragedy of typhoid epidemics. A schoolmaster at Deganwy, North Wales, brought an action for damages against the executors of the late proprietor of Marl Farm, Emmanuel Jones, for breach of warranty in connection with the supply of milk to his schools. The plaintiff appeared to rely mainly upon the Sale of Foods Act, whereby, as a customer, he was entitled to believe he would receive a pure milk supply. The crucial point before the Court, therefore, was whether the enteric fever at the school was due to contaminated milk supplied from Marl Farm. The plaintiff and his daughter contracted the malady and recovered, but his wife

died; three pupils also took the disease. Out of 250 persons in the neighbourhood who took their milk from the implicated farm 24 suffered from typhoid fever. The first to be attacked, in February, 1909, was Mrs. Thomas, housekeeper to Emmanuel Jones; she was at first removed to hospital, but insisted, on March 16th, on returning to the farm, when partially recovered, and it was not until after her return, namely, April 3rd, that the school was attacked in the person of one of the schoolboys. The plaintiff, on opening the school in 1905, obtained certificates as to soundness of drainage, water supply, and of sanitary conditions of Marl Farm. The medical officer of health of the district, Dr. Travis, for some time attributed the outbreak to the defective state of the drains, but on June 8th he wrote to plaintiff: "At first we were unable to trace the infection which occurred, but subsequent events showed clearly that the contagion was carried to your school in the milk." There was no satisfactory explanation at the trial as to what were the "subsequent events" referred to, and it is a somewhat disappointing feature of the trial that Dr. Travis did not appear as a witness. Indeed, the difficulties with which those dealing with typhoid fever are often faced were shown in other aspects of the case. Sir James Barr, out of two samples of blood taken from Emmanuel Jones, who had visited his housekeeper in hospital, in one instance failed on laboratory examination to detect the bacillus typhosus, while in the other he himself found "evidence of slight infection," presumably by the agglutination test. Apparently on the strength of seeing the blood taken by Sir James Barr for examination Dr. John D. Jones certified that Emmanuel Jones was suffering from enteric fever. In Court he admitted that, although he did not personally believe in the accuracy of that diagnosis, he nevertheless certified to death from valvular disease of the heart, typhoid fever, and congestion of the lungs. For the defence it was argued that the outbreak arose from an outbreak at Llandudno Junction, and from infection conveyed (by rats) up the sewers and drains to the school. It was shown that there was a defective grease trap, that a drain ran under the floor of an extension of the school buildings, and that there was an open sewer in a lane near the school. The medical officer of the county, Dr. Meredith Young, stated, on the other hand, that the drainage system at the school was well planned and well executed. The jury found that the plaintiff, his daughter and the pupils contracted the disease from milk supplied from Marl Farm, and that his wife's infection was by "contact." They awarded plaintiff damages to the extent of £500. One of the points urged by the defence was, that out of 150 visitors at a hydro-pathic establishment supplied with the incriminated milk, only one took the disease. On the other hand, six servants were attacked, a fact pointing to some special modification of the bacilli in the case of the visitors. In the course of the trial it was frequently asserted that the old theories of infection by the agency of drains and by aerial carriage were exploded. While it may be at once conceded

that the vast majority of cases are due to water, milk and other food contamination, and to "contact," there may be possibly a fair margin of infection that, under special conditions, has been transmitted through the air. In our present stage of knowledge, at any rate, it would be wiser to bear in mind that such a possibility has not yet been finally disposed of.

#### A MODERN MIRACLE IN SHEFFIELD

Now that it is becoming recognised generally that the physique of the nation is a matter demanding national care, all essays in that direction command more than a usual share of interest. One of the first logical applications of the new gospel has been the increased attention paid to the welfare of children. Of the many manifestations of this solicitude, such as medical inspection, free meals and the Children Act, it is not our present intention to speak, but we wish to allude briefly to an organisation that has been already alluded to in these columns, namely, the open-air school for delicate or backward children, as carried out at Charlottenberg, London, and other places. An account has recently been sent us by an old and valued correspondent of a movement of that kind that has been successfully adopted in Sheffield. In a busy industrial population of that kind, the necessarily crowded and unfavourable environment must inevitably result in the production of a number of children who, by reason of anæmia, inherited taints of various kinds, want of good air, food, clothing and housing, are unfitted physically to reap the benefits of compulsory education, and who in later life swell the ranks of the unfit who form a permanent addition to the population of our reformatories, prisons, workhouses and asylums. The results obtained by the Sheffield Education Committee's open-air school at Whitby appear to be no less striking than remarkable and conspicuous. It is described in a special article in the *Sheffield Daily Telegraph*, under the heading, "Young Children for Old," with the sub-heading of "Sheffield Miracles." The writer says that wrinkles and old looks have been banished from the faces of its scholars. "As a result of its working," he continues, "there are children in Sheffield to-day who were never really children before. They went to the school looking more like old men and women, with wasted frames, wrinkled brows and sunken eyes, but, after four months' life in the open air, good feeding, and removal from the environment of the streets, they have become children." The open-air school may be regarded as an extension of the special provision made for special classes of defective school-children, the backwardness in this special instance being the result of physical defects, such as anæmia and malnutrition, produced by squalid surroundings, insufficient and improper food, and insufficient sleep. The chief features of the school are, good and plentiful food, little education, life and exercise in the open air, and a regular allowance of midday rest, with attention to personal hygiene and regular bathing. Under these conditions remarkable results have been

obtained, amongst which may be noted the addition of 11 lbs. and 12 lbs. to the body-weight in the four months. The open-air school is, of course, costly, but it seems more than likely that the rate-payers will find it, in the long-run, a wise insurance premium against the physical, mental and moral deterioration that casts upon the community the burden of supporting a large population of paupers, criminals and other social derelicts. In any case, the medical officer of the Sheffield schools, Dr. Ralph Williams, is to be congratulated on the enthusiasm with which he has inaugurated and carried out the scheme. To replace a white-faced and prematurely-aged juvenile population by a race of alert, eager and full-blooded children is, indeed, a feat of which any man concerned may be proud, and none the less so when his altruism goes hand in hand with the exercise of a noble and self-sacrificing profession.

#### CURRENT TOPICS.

##### Beecham's Pills.

THE case of *Beecham v. Martin*, in the Dublin Court of Chancery, has assumed an interesting phase, in consequence of the nature of the defence set up by the defendant. The plaintiff's charge is that the defendant had passed off and sold to the public as "Beecham's" certain pills other than "Beecham's." The defendant, while denying that he ever was guilty of the offence alleged, stated that Beecham's pills were composed mainly of powdered ginger and soap, with a small percentage of aloes, and that the prime cost of the ingredients of a box of 56 pills, costing retail 1s. 1½d., and advertised as worth a guinea a box, was about one half-farthing. The defendant further alleged that the plaintiff had for years been falsely advertising the pills as a cure for constipation, headache, dizziness, wind, pain and spasms in the stomach, pains in the back, restlessness, insomnia, indigestion, want of appetite, fulness after meals, vomiting, sickness of the stomach, bilious or liver complaint, sick headache, cold, chills, flushing of heat, lowness of spirits, and all nervous affections, scurvy and scorbutic ulcers, wounds, kidney and urinary disorders and other complaints. It was further pleaded that plaintiff by such false representation that his pills had curative and medicinal properties that they did not in fact possess, had disintitiled himself to the assistance of a court of equity. This line of defence, it will be remembered, is the same as that adopted by the defendant in the "Bile Beans" case, before the Scotch Courts. The final trial cannot come on for some time, and we, of course, offer no comment while it is *sub judice*.

##### Dublin Corporation and Health.

As our readers must be aware, Dublin is by far the most unhealthy city in the United Kingdom. Its death-rate not only surpasses all others in the Kingdom, but is one of the three or four highest among the great cities of Europe. Outside Russia, indeed, it probably enjoys an inglorious pre-eminence. In our columns a few weeks ago we noticed a letter dealing with the health of the city, which had been addressed to the Lord Mayor by

the Medical Officer of Health, Sir Charles Cameron. One would expect that, knowing the evil reputation their city possesses, the members of the Corporation would be anxious to do everything in their power to improve the sanitary condition of Dublin. Such an expectation would meet with grievous disappointment in the actual facts. Nevertheless, the callousness exhibited comes as a shock even to those who expect little from the Dublin Corporation. A special meeting of the Corporation was summoned for last week to deal with Sir Charles Cameron's letter. The meeting fell through, *because a quorum did not attend*. Half a dozen members are all who could be found to take so much interest in the sanitary affairs of the city as even to attend a meeting at the City Hall.

#### Members or Licentiates?

IN our two last issues we published letters suggesting that the Irish and Scottish Colleges of Surgeons should put themselves in line with the English College by granting diplomas of membership instead of licences, as at present. There is no doubt that much confusion is caused in the lay mind by the multiplicity of medical titles, and Irish and Scottish licentiates practising in England suffer a certain disability in that the title of licentiate seems to suggest some inferiority to that of member. Any movement tending toward the simplification of titles deserves the support of the profession, and it seems to us that if the licentiates of the Irish College really want the other title, they cannot hope for a better opportunity to press their claim than the present. In the difficulties that face the College its strongest asset is the loyalty of its Fellows and Licentiates. That loyalty exists, and may be counted on not to fail, but it should give the Licentiates a claim to press their demand for a change of title, if they are truly serious in the matter. The corporations are, however, conservative bodies, and will certainly not move unless a change is desired by the great body of the licentiates. Some years ago a petition to the Royal College of Surgeons of Edinburgh was signed by some 500 licentiates, in response to an appeal issued by the Association of Medical Diplomates of Scotland.

#### The Ethics of Anti-Vaccination.

THE action in which Dr. Martha Adams sued for damages for an alleged libel in *Vanity Fair* ended on Friday last with a verdict for the plaintiff, with nominal damages. The most interesting episode in the trial was formed by the evidence of the Hon. E. A. G. Pomeroy, the writer of the article objected to. According to the *Times* report, Mr. Pomeroy stated that, in the main, he believed that freedom from vaccination would spell bankruptcy to half the medical profession. He described doctors as "fee-hunters," and being asked if he meant that doctors pretended to believe in vaccination because they wanted fees, he replied: "Well, poor fellows, they have got to live." Mr. Pomeroy did not go on to explain that, with the rarest exceptions, the large section of the profession who derive no sordid benefit whatever from vaccination, and have no interest in supporting a deadly fallacy, prove their belief in the efficacy and harmlessness of the operation by having their own

children vaccinated, and re-vaccinated; and he did not explain how the training of a doctor thus converts the average man of superior intelligence into an anti-human wretch capable for paltry gain of sacrificing the health of those nearest and dearest to him in pursuit of his nefarious aim. All this and other deductions from his facts Mr. Pomeroy no doubt reserves for future occasions. When he completes his indictment of the profession he will no doubt say whether he is following the spirit of the advice which he stated he had suggested to parents, namely, that, although "lying was wrong, if you could not get what you had a right to in any other way, you were entitled to do so." The formulation of this high ethical standard cannot fail to supply poison to the sting with which anti-vaccinationists so effectually assail a guilty and trembling profession!

#### The Dental Jubilee.

THE dinner given by the President and the Council of the College of Surgeons of England on Thursday last to celebrate the jubilee of the dental diploma proved an interesting and memorable gathering. It was unfortunate that, owing to advancing age and the inclement weather, the sole survivor of the memorialists who in 1855 first urged upon the College the desirability of founding a dental qualification, was unable to be present. Otherwise it was a notable assembly, including many of the men to whose labours the establishment of dental surgery as a legitimate curative speciality has been due. The chief feature of the evening was the speech of the President, Mr. H. T. Butlin, in proposing the toast of the "Dental Profession." It is difficult to understand how, without literally an enormous amount of study, Mr. Butlin could have made himself familiar, not only with the history of the dental movement beginning some sixty years ago, but also with the personalities of the chief actors in that history. His narrative was, although concise, quite complete, and it had throughout much of the character of a human document, and it was touched with so nice a sense of humour that it proved deeply interesting as well as entertaining to the whole of his large audience. Mr. Butlin illustrated his sketch of the progress of dental science by reference to three standard text-books, those of Mr. Jones, Mr. Sewill, and Mr. Collyer—with each of which he was evidently well acquainted. After dinner, an adjournment was made to the room set apart for the dental museum, now handed over to the College by the Odontological Society, on its incorporation in the Royal Society of Medicine. Mr. Butlin stated in the course of his speech that this is now unquestionably the finest dental museum in the world.

#### Medical Arrangements at Unions.

THE Sheffield Guardians do not seem to be particularly happy over the medical arrangements connected with the Workhouse. At a meeting of the Guardians, held Wednesday, December 1st, 1909, a resolution was moved, and carried, "That all questions as to the duties of the medical officer of the Workhouse, as to the assistance rendered to him, and the Workhouse itself, by the hospital medical officer, and the cost of that assistance, be referred to a special committee for consideration

and report." An amendment was moved, but lost, "That the Local Government Board be asked to hold an inquiry into the manner in which the duties of the medical officer of the Workhouse are being carried out, and the extent to which they can be properly performed by the medical officer of the hospital." The mover of the amendment described the medical officer's visits as "a sort of hurricane visit to the Workhouse each day." As far as one gathers from the report of the meeting of the Guardians, it seems that they are under the impression that the medical officer to the Workhouse looks to the resident medical staff in the Union Infirmary to do his work for him, when unable to do it himself. The Guardians contend that the medical officer to the Workhouse, or his deputy, were altogether responsible for all the duties in connection with attendance upon patients in the Workhouse, and that the resident staff have quite enough to do to attend to their own duties; the general practical point is the two departments are altogether independent of each other, and should be kept so.

#### Preservatives in Cream.

THE question of the use of preservatives in cream is of importance, in view of the fact that cream is so often relied upon in various conditions of malnutrition; and the subject has, therefore, been frequently noticed in these columns. The presence of an excess of boron and other preservatives converts the cream into a poisonous compound, and this abuse cannot at present be checked without statutory authority. Medical men can only put their patients on their guard, and advise them to obtain their cream, when possible, from one or other of the firms that give a guarantee of its purity. Under the direction of Dr. Collingridge, twelve samples were obtained recently in order to determine the extent to which preservatives are used in preparing cream for retail in the City. With the exception of two, they all contained boracic acid preservatives. In three cases only, however, was the amount found in excess of the limit, 0.25 per cent., recommended in the Departmental Committee's Report, to which reference was made in our last note on this subject. The fact, however, remains that the purchaser has no means of ascertaining the amount of preservative present, for although in five samples the presence of boric acid was notified by label, and others were described as "preserved" cream, in no case was more definite information afforded.

#### Women as House Surgeons.

THE Committee of the Manchester Infirmary have adopted the report of their sub-committee elected to inquire into the question of the appointment of women to resident posts. Their decision is adverse to the admission of women to such offices, and it is worth while giving a summary of the reasons alleged for this opinion. The Committee found that no male patients, and very few female patients preferred to be attended by a woman, and they did not learn that there was any desire among the patients for a change. They further expressed the opinion that medical women ought not to have charge of male wards. In the surgical wards there are

things to be done for men which a woman practically cannot do, and in both medical and surgical wards there are things to be asked and told which a woman cannot ask and would not be told. A medical woman is not, therefore, as useful an officer in general hospitals as a medical man. The Committee noted that medical women have not generally been appointed to resident posts in general hospitals with medical schools attached; the Royal Free, London, one of the rare exceptions, has as one of its main objects the education of medical women. In their own special case the Board of the Manchester Infirmary find that to accommodate women house-surgeons would entail substantial building additions involving heavy expense, and they do not feel justified in incurring this for the purpose of an experimental change which could not be of advantage to the institution.

### PERSONAL.

THE KING has been pleased to appoint Mr. A. J. Ram, K.C., a member of the Royal Commission on Vivisection, to be Chairman of the Commission in the place of the late Viscount Selby.

THE PRINCE OF WALES last week sent gifts of pheasants to Guy's and St. Mary's Hospitals.

LADY CONSTANCE HATCH, on December 2nd, opened a bazaar at the Royal Ear Hospital, Soho, in aid of its funds.

SIR DONALD MACALISTER, as President, occupied the chair at the 90th Session of the General Medical Council at its Oxford Street offices.

DR. BASHFORD will, it is announced, be present at the *conversations*, and will demonstrate some of the recent cancer researches at the Polyclinic, Gower Street, on Friday next.

DR. G. A. HERON, the Treasurer and Chairman of the Council of the London and Counties Medical Protection Society, addressed the members at the special general meeting on November 24th last.

DR. W. H. RIVERS, Mr. J. H. Parsons, and Dr. W. W. Watson gave evidence last week before Sir Francis Mowatt relating to colour vision at sea at the special inquiry being held by the Board of Trade.

THE Medical School of King's College Hospital (separated by the King's College, London (Transfer) Act) has been admitted as an independent body to the status of a school of the University in the Faculty of Medicine.

PROFESSOR J. ROSE BRADFORD was re-elected Secretary of the Royal Society, in conjunction with Sir Joseph Larmor. Amongst those elected to the Council were Dr. W. H. Gaskell and Dr. C. J. Martin. Sir Archibald Geikie was re-elected President.

WE much regret to announce the death of Mr. Marcus Gunn, Senior Surgeon to the Royal Ophthalmic Hospital, Moorfields, and Ophthalmic Surgeon to the National Hospital for the Paralysed and Epileptic, Queen Square, W.C., which occurred at Hindhead on Monday week, November 29th.

THE action by Dr. Martha Adams, a medical inspector of schools at Twickenham, against Mr. Ernest Pomeroy, the writer of an article in *Vanity Fair*, criticising her conduct in the matter of vaccination, ended in the High Court on Friday last in a verdict for plaintiff, with one farthing damages.



## A CLINICAL LECTURE ON THE SYMPTOMS OF INTESTINAL STENOSIS.

By PROFESSOR A. MATHIEU, M.D.,

Physician to the Paris Hospitals.

[SPECIALLY REPORTED FOR THIS JOURNAL.]

THE diagnosis of incomplete intestinal stenosis and the resulting symptoms of obstruction is often a matter of some difficulty at the onset, and their significance is very apt to be overlooked, so that the actual gravity of the patient's condition is not recognised and surgical aid is not obtained until the complete picture of intestinal obstruction presents itself. Now the prognosis in these cases is the graver the longer operative intervention is delayed. The early recognition of these states is, therefore, a matter of the greatest importance. From this point of view sufficient attention is hardly paid to the symptomatic significance of intestinal splashing and the phenomenon of pseudo-ascites.

Whenever there is narrowing of some parts of the digestive tract, wherever situate, the tendency above that spot to the production of certain symptoms is the same, viz.: retention of digestive fluids and hypersecretion, together with the retention of more or less flatus. We are, therefore, in presence of more or less dilated cavities, more or less filled with gas and fluid.

When the narrowing is situated in the pylorus the symptoms are familiar to us. We know that a patient with pyloric stenosis will present stasis hypersecretion with the accumulation of a large quantity of wind, either from fermentations or swallowed air. In such cases there is dilatation and gastric stasis.

The symptoms of intestinal stenosis are less pronounced and less well known. Let us take a case of stenosis limited to a part of the intestine high up. A lady, who had been examined six years previously and who had suffered from indigestion for a long time, complained of pain in the region of the stomach with occasional free vomiting. When fasting, marked splashing could be elicited in the umbilical region and below. The splashing was readily caused by shaking or digital succussion. This justified the conclusion that the stomach contained stagnant liquid and alimentary *débris*. Exploration by the aid of a tube, however, gave a negative result, so that one was led to suspect hour-glass stomach, but a more rational explanation would have been that the case was one of limited dilatation of the intestine, this conclusion being based on the observed fact that the splashing was very extensive, reached low down and gave a special note. On the case being operated on by M. Quenu, the obstacle was found to be situated in the lower third of the ileum where there was a circular stricture of fibroid tissue within which they discovered an osteoma, quite a curiosity in human beings, though it would seem to be fairly common in veterinary practice. In short, it was a case of dilatation of the upper part of the small intestine simulating dilatation of the stomach.

Nowadays, radiographic examination affords arterial assistance in the differential diagnosis of

hour-glass stomach and dilatation of the upper part of the small intestine.

On the other hand, we may meet with dilatation of the stomach independently of actual stenosis. For instance, a patient, about thirty years of age, was admitted with symptoms clearly pointing to ulcer of the stomach, viz.: pain, bleeding into the stomach manifested by melæna, tumefaction of the epigastric region, splashing sound on being shaken. At first we suspected juxta-pyloric ulceration with spasm and acute dilatation of the stomach, but, as in the case related above, introduction of the stomach tube gave a negative result. It turned out to be a case of dilatation of the transverse colon. Dilatation of the intestine lasting two days was followed by copious evacuation of the intestinal contents, and this in its turn was followed by spasm of the large intestine, that is to say, the spasm of the lower part now extended to the upper part of the ascending colon.

It follows that it is not sufficient to make out circumscribed or generalised splashing in the intestinal domain to justify the diagnosis of intestinal obstruction, consequent on progressive narrowing. Other symptoms must be present, and, in addition, the course of the subsequent developments must be conformable to this hypothesis.

Localised dilatations of the cæcum and ascending colon often constitute the earliest symptoms of gradual stenosis, in which event we get a syndrome that has been well described by Bouveret, of Lyons. This syndrome is met with in presence of progressive stenosis of the right curvature of the colon, and under these circumstances the mischief is usually an obliterating cancer.

During the acute attack the patient complains of sharp pain in the right flank. If we make an examination during the attack the abdomen is found to be swollen, more on the right than on the left side or over the middle line. It may even be possible to make out the dilated and prominent colon which may be the seat of well-marked peristaltic contractions. If we now have recourse to succussion we get splashing within the dilated colon, and this can also be provoked by digital succussion.

These attacks recur from time to time with intervals of from a few hours to two or three days. Between the attacks the cæcum and dilated ascending colon are no longer contracted and tense, but they are still dilated, and limited splashing may still be elicited. This syndrome is of great significance in respect of the diagnosis, and justifies our concluding in favour of stenosis, usually cancerous, of the right angle of the colon.

This is an example of the partial dilatation and circumscribed splashing which are met with in the intestine in presence of progressive stenosis.

These patients, however, have a tendency to general dilatation of the intestine with the production of symptoms of obstruction which, in time, merge into those met with in association with narrowing of any other part of the intestine, the ileo-cæcal valve, for instance. The only distinguishing feature is the existence of an initial period, plainly limited to dilatation of the cæcum, pointing to the existence of a limited obstacle at a particular and strictly defined spot in the large intestine.

We may leave on one side the cases in which we get circumscribed splashing as the result of partial twisting of a loop of intestine, and we will pass on to consider the symptomatology of extensive splashing in the intestine, usually accompanied by symptoms of pseudo-ascites.

Ricard brought before the French Surgical Society the case of a carpenter, admitted on account of serious abdominal symptoms of four days' standing. The attack had commenced with severe pain in the right groin coinciding with the appearance of a small tumour the size of a filbert. His medical man took it to be a case of strangulated hernia and reduced the tumour by taxis. The symptoms, however, persisted, the general state became more threatening, the pain got worse and vomiting supervened, in fact, all the signs and symptoms of acute obstruction as the result of strangulated hernia. The face was drawn, the eyes hollow, and the complexion cyanosed; there was diarrhœa and, as a matter of fact, diarrhœa motions are the rule in cases of incomplete stenosis of the intestine not only the acute, but also the gradually progressive.

The pain subsided in the course of a few days and the abdomen became soft, flat and indeed somewhat concave. There was an entire absence of the tympanites so commonly met with in cases of obstruction. The patient was much prostrated. The results of examination were as follows: Over the middle region of the abdomen, as well below as above the umbilicus, there was well-marked splashing on succussion, and when the patient was placed on his left side there was an area of partial dullness limited to the lower third of the abdomen on that side with, on the contrary, absolute resonance on the right side. When he was turned over on to the right side the dull area became resonant and the resonant area became dull; in fact, the symptoms pointed to the displacement of fluid inside the abdomen. Had it not been for the splashing sound one might have suspected ascites. These are the signs of pseudo-ascites met with in partial obstruction of the lower part of the small intestine. Laparotomy showed the existence of compression of the lower part of the ileum in the hernial sac.

In another case the patient, a lady, had been suffering from repeated attacks of very painful colic with well-marked abdominal distension and recurring vomiting. Finally, complete obstruction set in. In this instance no splashing sound could be elicited, although the loops of intestine were much distended. In point of fact the symptoms of pseudo-ascites are only met with in cases where there is comparatively little abdominal distension and accumulation of flatus, and this is easy to understand, because excessive distension of the intestine may prevent splashing and the sensation of moving liquid.

This pseudo-ascites was pointed out by von Litten in 1885 at the Berlin Medical Society in

a tuberculous subject, in whom they had diagnosed chronic peritonitis with ascites. At the autopsy they discovered no ascites, but well-marked intestinal dilatation.

In 1897 Pierre Delbet mentions having met with pseudo-ascites in two cases of incomplete stenosis with progressive intestinal obstruction, and he describes a sign which enables us to distinguish it from true ascites, viz.: the line of dulness is regularly horizontal in the latter, whereas in the others it presents areas of resonance dull to the inclusion in the intestine of gaseous collections.

The existence of the sound of moving liquid and shifting dulness at the lower part simulating ascites enables us, therefore, to recognise progressive stenosis of the intestine, and, within certain limits, to determine its situation. Nevertheless, the value of this sign is not absolute, although it constitutes an important diagnostic element when the history of the case, in other respects, is suggestive of the existence of progressive partial intestinal stenosis. It is, therefore, a sign to be carefully looked for, but which can only be relied upon when all the other symptoms, and the course of the case point in the same direction. We must not overlook the fact that intestinal splashing is a common symptom in certain forms of diarrhœa.

NOTE.—A Clinical Lecture by a well-known teacher appears in each number of this journal. The lecture for next week will be by: *Dr John F. H. Broadbent, Bt., M.D. Oxon., F.R.C.P. Lond., Physician to St. Mary's Hospital, Paddington. Subject: "The Prognosis and Etiology of Mitral Incompetence."*

## ORIGINAL PAPERS.

### THE OPSONIC METHOD. (a)

By HERBERT W. G. MACLEOD, B.Sc., M.D.  
EDIN., M.R.C.P. LOND., D.P.H. LOND. AND CAMB.

Physician, Western General Dispensary.

METCHNIKOFF, as we know, brought forward the theory of Phagocytosis several years ago as an explanation of natural and acquired Immunity.

Phagocytosis may be defined as the power possessed by certain leucocytes of taking-up, or ingesting bacteria. Those specially concerned in this process are the polymorphonuclear and mononuclear leucocytes, known also as micro- and macro-phages. This property of ingesting organisms is also possessed by the connective-tissues and endothelial cells of the body.

But before phagocytosis takes place, another process known as positive chemiotaxis occurs. It is an attraction exercised by bacteria on leucocytes. Following these two stages is a third one—that of intra-cellular digestion or disintegration of the organisms. By some this is thought to be caused by certain ferments which are known as "cytases." We have then (to recapitulate) the three stages of Chemiotaxis, Phagocytosis and Digestion which cause immunity.

Metchnikoff considered that immunisation was due to a stimulation of the phagocytes; but Wright has advanced a later theory based on that of phagocytosis. He is of the opinion that certain anti-bacterial elements are present in the blood—

(a) A Lecture delivered before the Worcestershire Medical Society followed by a Demonstration.

serum and that they act first on the bacteria and so alter these organisms that they can in consequence be more readily "ingested," or absorbed, by the leucocytes.

To these substances in the blood he applied the name "Opsonins," derived from ὀψωνεω, "I prepare food for."

Sir A. Wright does not consider that successful immunisation is caused by an increased capacity for phagocytosis of the white corpuscles, but to increased "opsonic" power of the serum. He and Douglas found, by experiment, that if bacteria which had not been under the action of serum were brought in contact with leucocytes which had first been washed in a solution of sodium citrate and then in physiologically normal salt-solution (that is to say one of 0.85 or 0.9 per cent. sodium chloride—which is approximately of the same specific gravity as the liquor sanguinis) the leucocytes ingested the organisms in a feeble and irregular manner. Some cells absorbed no bacteria, others only a few. If the strength of the salt-solution was increased to any extent, phagocytosis did not occur at all.

On the other hand, if the bacteria had been previously exposed to the action of blood-serum and were then brought into contact with leucocytes treated as before, every leucocyte rapidly took in many organisms; and this occurred even if the strength of the salt-solution was raised above the normal.

Artificial Immunity, as we know, is divided into "active" and "passive"; the former being produced by injecting directly into the patient (or the animal) living or dead organisms, or their toxins. Passive immunity is caused by injecting into the patient the serum of an animal which has been immunised by the active method.

The opsonic treatment is the active immunisation of the patient, by the injection of a vaccine, prepared from cultures of bacteria, preferably of recent growth. They are washed off in sterile normal salt solution, and this suspension of bacteria is shaken up for some time, so as to break up "clumps" and "chains." The vaccine is standardised, and all the organisms are killed at a temperature of 60° C. If proved to be sterile, by making subcultures, an antiseptic (such as weak solution of lysol, or carbolic acid) is added, so that 1 c.c. of the vaccine contains 200—or 1,000—million bacteria, or any required number of them. Tubercle vaccine is prepared from tuberculin ("T.R.") suspended in a lysol-salt solution, and the initial dose is about a twenty-thousandth of a milligram.

Bacterial disease is treated by injecting the corresponding vaccine, and, if possible, one freshly prepared from the patient. A stock solution may be used; and this, if kept under proper conditions, will be of service for a long time. Many of you, Gentlemen, have no doubt successfully employed serum-therapy in treating cases, and you may well ask what are the advantages of the Opsonic method over treatment by serum? We know that the latter has been most useful, in the form of Antitoxin, in cases of Diphtheria; it has also been successful in Tetanus. Serum injection causes passive immunisation in contra-distinction to vaccine therapy, which, as we know, is "active." The injection of serum for other diseases has on the whole been disappointing, and it has not been satisfactory in cases of Tuberculosis,—contrary to expectation. Com-

paring the two methods of treatment: in the one we have to judge the effects on the patient by clinical observations which may be very variable and deceptive, but on the other hand, we have the "opsonic index" to guide us in addition to symptoms manifested by the patient.

The "index" is a ratio of percentages. It is obtained by examining under the microscope a "blood-spread," suitably prepared and stained, and counting the bacteria which have been ingested by at least one hundred polymorphonuclear leucocytes, which have been acted on by anti-bacterial lements in the patient's serum. This number forms the "numerator" of the fraction. The "denominator" is the number of organisms (of the same emulsion) taken up by a hundred leucocytes subjected to the influence of the serum of a normal individual (or of mixed normal sera) similarly prepared and stained. The result of dividing the former "count" by the latter is the "opsonic index." The normal serum is taken as unity. It follows, then, that if the patient's serum gives a higher phagocytic count than the normal the index is high; if it practically coincides with the normal the index is normal; and if it is below the normal phagocytic count the index is correspondingly "low." A question that will naturally arise is "What information does the index afford us with respect to treatment and dosage?" It may be stated, generally, that an index below the normal (to the corresponding vaccine) indicates disease. There are certain conditions modifying this conclusion, which will be better known as our experience increases. But we must bear in mind that what Wright calls the "negative phase," occurs in many diseases: that is, a lowering of the index (temporarily) is attended by a subsequent rise; particularly is this so in tubercle. If this phase be followed by a steadily rising index, it is assumed that the case is improving under treatment.

With regard to dosage, the following observations have been made: a rise after injection with little alteration of the index for several days subsequently, indicates a small dose; a slight fall succeeded by a marked rise, points to a correct dose; and a fall followed by a further fall, means that too large a quantity has been administered. Or, to put it in other words: a moderate dose is followed by a short negative phase and succeeded by a positive phase lasting about ten days. A smaller dose has a positive effect rapidly, but this is not long maintained. An excessive dose has a negative phase which lasts a long time.

The opsonic treatment has already afforded good results; particularly so in diseases of the skin, due to staphylococcal and streptococcal infection. It has also been beneficial in cases of tubercle, both for diagnosis and for treatment. Cases of acne, furunculosis and erysipelas have given excellent results; and in instances of a mixed infection it is best to immunise against each organism. I have obtained good effects in protracted suppuration after a dental operation, the organisms in the discharge having been isolated bacteriologically; and I have a case of *Pyorrhoea alveolaris* under observation in which I think vaccine treatment will afford satisfaction.

It is a *sine qua non* that the correct technique be employed in taking the index. It should be estimated before using the vaccine, and subsequently, and it may be necessary to ascertain it frequently in severe cases.

In patients suffering from diseases of the skin caused by coccal infection the index need not be taken, and the results of treatment and the progress of the case may be watched by clinical observations alone. This applies chiefly to patients who exhibit superficial lesions, the symptoms being easily noted; but it is inapplicable to those diseases the progress of which cannot be so readily followed.

To estimate the index, we require to have washed corpuscles, a bacterial emulsion, the serum of the patient, and a normal serum as a "control." The corpuscles are obtained from normal blood run into a small tube containing a 1.5 per cent. solution of sodium citrate, to prevent coagulation. This is shaken up, and is then centrifuged. The red and white corpuscles sink to the bottom, and the supernatant fluid is pipetted off. Sodium chloride solution of 0.85 or 0.9 per cent. strength is next added to the corpuscles, and they are again centrifuged and the clear upper liquid removed. At the bottom of the tube a thin layer of leucocytes is seen to lie on the heavier red corpuscles. This upper layer may be pipetted off and put into another tube for use; or the two layers may be shaken up and utilised.

The bacterial emulsion (except in the case of tubercle) is made from fresh cultures in agar. They are rubbed up in 0.85 per cent. salt solution (or in 1.5 strength in certain cases); centrifuged to break up clumps or chains of bacteria; and if necessary, diluted.

The blood of the patient, and also that from a normal person, is received into curved "capsules" made under the blow-pipe from quill glass-tubing. The blood must first be allowed to clot. It is then centrifuged to separate the serum. By means of specially prepared pipettes fitted with rubber teats, a measured volume of washed corpuscles, and equal volumes of bacterial emulsion and of serum are successively sucked up, a minute bubble of air separating each. These are blown on to a clean slide and mixed by being drawn up and down the pipette several times. The fine end is then sealed in a flame, at a safe distance from the fluid, and placed in the incubator at a temperature of 37° C. for eight or fifteen minutes as may be necessary. During this period the leucocytes ingest the bacteria, which have been acted on by the serum.

The same procedure is gone through with both sera. The contents are blown on a clean slide, mixed, and then a small drop is placed at the end of another slide and spread by the edge of a piece of cigarette paper, or of gutta-percha tissue cut "square." A glass spreader may be made, having a slightly concave edge, or the end of a narrow slide may be used at an angle of 45° to push the drop of blood along.

The smear is then fixed with a saturated solution of corrosive sublimate, or by the vapour of formalin, and suitably stained. For tubercle-bacilli, the Ziehl-Neelsen method is employed, and for other organisms Carbol-Theonin-blue or Leishman's stain, a modification of Romanowsky's. In this case previous fixing of the film is not necessary.

The index is then estimated as already explained.

(A demonstration of the *technique* and apparatus was given, and stained specimens were exhibited under the microscope.

## ADHESIONS OF THE DIAPHRAGM.

By L. BASSENCE, M.D.,

Staff Surgeon, Berlin.

[SPECIALLY REPORTED FOR THIS JOURNAL.]

THE physical examinations usually employed (inspection, auscultation, percussion) not infrequently give the inquirer only an indistinct idea of the position and movements of the diaphragm, and of the pathological changes of condition. Here the introduction of the Röntgen rays for diagnostic purposes, in regard to internal diseases, has made clear what was already known and imparted new knowledge. A glance at the illuminated screen shows sensible changes of position of the diaphragm, bilateral rise with increase in the contents of the abdominal cavity, whether meteorism, ascites, tumour, or physiologically pregnancy, a bilateral depression in acute pneumonia, unilateral rise in gaseous distension of the stomach, considerable increase in size of the liver, or unilateral paralysis of the diaphragm, unilateral depression in emphysema, and filling of the pleura with air or fluid.

Very much more important are the conclusions to be drawn as to the extent and character of the movements of the diaphragm afforded by the use of the Röntgen rays. I here recall that it was the fluorescent screen that first gave any satisfactory information regarding the normal inspiratory fall of the diaphragm, and that any change from this type came to be grasped and understood. Amongst the latter immobility of one-half of the diaphragm on inspiration—the so-called Williams' symptom—has gained the importance—not undisputed, however—of a sign of commencing tuberculosis of the apex.

Amongst the changes of character of the movements of the diaphragm, the atypical ones are of special interest. First among these are the visible flexions and kinkings of one or both leaflets of the diaphragm such as are quite frequently to be seen in advanced cases of pulmonary tuberculosis, when the inflammatory changes have reached the pleura of the lower lobe. In such cases the diaphragm shows the normal contour at the moment of pause, and it is only on deeper inspiration that one or more wave-like or tent-shaped bulgings out are to be seen. A peri-bronchial tuberculous affection is generally the cause of the phenomenon.

Such images have long been known to those who have made use of the Röntgen rays in the diagnosis of internal diseases, and their mechanism has been exhaustively explained in the "Atlas" by Holtzkecht that appeared in 1901, and which has never been improved upon.

Röntgenoscopy has shown that adhesions of the diaphragm take place, and that they may lead to considerable disturbance, even where no other morbid changes are present; that such adhesions may take place between the pleura pulmonaris and the pleura diaphragmatica, or between the parietal pericardium and the diaphragmatic portion of the pleura. When such images lie outside the pleural sinus, they are no longer to be detected by auscultation and percussion, as the respiratory sounds over the lower border of the lung are not altered by them, the respiratory gliding movement is not interfered with. At the most, atelectic sounds may occasionally be heard at the lower margin of the lung, and give rise to a suspicion that the lower part of the lung does not get a sufficient supply of air in consequence of diminished action of the diaphragm. The diagnosis, therefore, when it is made, can only be one of probability. Röntgen illumination, on the other hand, gives conclusions that are definite. It is true that the adhesions first become recognisable when they have reached a certain point, but with them the changes of the type of respiration, the irregularities, the indentations or scalloping of the diaphragm on inspiration, make the origin of the condition clear.

Of course, in making a Röntgenological diagnosis, the greatest caution must be exercised. The illumination must be made in various directions, and with the lamp at various heights, the patient always being kept at the same distance from the light. Covering shadows, that may be caused by projection of the

anterior or posterior ends of the ribs, must be excluded. Photographic apparatus should only be made use of when everything has been made clear. The picture should only be taken during the inspiratory pause.

Literary communications on the subject are very scarce.

Levy-Dorn and Zadek, as early as 1898, showed an illustration of a case of echinococcus of the lung, with distinct inspiratory kinking of the diaphragm. Benedikt showed an adhesion of the pericardium to the diaphragm by means of Röntgen illumination. Strauss showed a peculiar case of stenosis of the oesophagus that had become constricted by adhesion of the pleura. Stuert reported five cases of adhesions between the pericardium and the pleura, in which the diagnosis could only be placed on a firm basis by the Röntgen process. More recently Lehmann and Schmoll have described three cases of pericardial adhesion after injury, after pneumonia, and after polyarthritis.

Considering the dearth of communications on this subject, it will not be out of place to give a report of six other cases that have been met with during the last 3½ years in the I. Medical Klinik, in a total Röntgen material of 2,000 cases, and which have much in common with those that have already been published.

CASE 1.—This case resembles the case published 10 years ago by Levy-Dorn and Zadek in a remarkable manner. It also was a case of echinococcus of the lung. The patient was shown before the Charité physicians by Wadsack in 1906, but without anything remarkable being observed in the diaphragm. The case was shortly the following:—

A labourer, æt. 61, was admitted into the Charité in January, 1906, for hæmoptysis. The history showed that the patient had no hereditary tendency and, it was said, had never been ill before. On examination, independent of a few râles over the lungs, nothing was noted except a moderate arterio-sclerosis. Every day several bloody sputa were expectorated.

Frequent searches for T.B. were without result. On Röntgen illumination, a dark shadow the size of a five-shilling piece was seen on the left of the left margin of the heart, and separated from it, the meaning of which was not plain at first. Two months after admission, during which period no noticeable change had taken place, he was suddenly attacked with violent dyspnoea, with expectoration of red, frothy, thin sputum, in which some hooklets were found. As the expectoration abated, it was seen that the shadow was still present, but less pronounced and less distinct. It was then thought to be caused by the echinococcus.

In the summer of 1907 the patient was again admitted, as fresh hæmoptysis had taken place. Examination for T.B. gave the same negative result as before. The rounded shadow to the left of the heart was the same as before. No fragments of echinococcus were to be detected in the sputum.

The Röntgen image now showed on deeper inspiration, close to the heart, a rounded arching of the right arch of the diaphragm banded towards its upper border, an undoubted adhesion of the pulmonary pleura to the pleural diaphragm. As the echinococcus was on the left, and nothing was found wrong in the right lung, the meaning of the appearance was difficult to understand. At last we found that two years previously a board had fallen from a great height on to the right of the man's chest, that he had lain for weeks in great pain in the right side, especially on deep inspiration. It was plain that a pleuritis had been set up by the injury, with participation of the diaphragmatic pleura, that had led to adhesion. It was especially to be noted that the patient now no longer complained of much pain on deep inspiration.

CASE 2.—The patient was a medical man, who had no hereditary tendency to tuberculosis, and who had never suffered from any serious illness. In the winter of 1906-7 he had suffered for several weeks from a violent bronchial catarrh, which did not, however, compel him to lie up. He was examined several times, when it was decided that there was no serious affection of the lungs or pleura. During the period of the catarrh the patient had experienced violent pain about

the lower margin of the right lung. Recovery took place in January, 1907, but, even after this, on deep inspiration, an impulse to cough was felt with considerable dragging pain in the left side of the chest. The patient himself located it in the parasternal line of the sixth intercostal space, and described the pain as a disagreeable dragging or pulling. Examination of the powerfully built man in April, 1907, showed no morbid condition of the lungs, and it was especially noted that the mobility of the lower anterior border of the right lung was perfect. Both pulse and heart were equally normal. Illumination showed nothing essentially abnormal, either in the heart or lungs. In the pause the contour of the diaphragm was normal; on deeper inspiration, however, a slight scalloping was noticeable at the summit of the right half of the diaphragm. As I touched the corresponding part of the chest wall with the finger, the patient said, "Yes, the pain lies just behind there."

I made the following diagnosis: Circumscribed adhesion of the pleura pulmonalis to the pleura diaphragm; and prescribed a corresponding treatment consisting in gymnastic exercises and breathing under resistance. Some months later the patient wrote that under the treatment his troubles had gradually subsided, and that he could already perform some difficult gymnastic turns without any trouble.

From the Röntgen figure the diagnosis appears to me to be free from objection. The origin of the adhesion was brought about by a slight pleurisy coming on during the course of the catarrh. The diagnosis also appears to be confirmed *ex juvantibus*.

CASE 3.—The patient, æt. 25, had never been ill previously. In November, 1904, he fell whilst carrying a heavy sack upon some steps, and sustained some bruises on the chest and face; erysipelas followed, and traumatic pneumonia of the base of the left lung. In four weeks' time he was discharged from the hospital, but had to give up the attempt to work on account of a stabbing and dragging pain in the left side of the chest on any severe exertion. He was then sent back to the Charité for observation. The patient was an unusually powerfully built man. Examination of the heart and lungs showed nothing abnormal. Neither was there any change in the respiratory movements or in the breath sounds. Over the costal arch, in the anterior axillary line, there was said to be tenderness on pressure over a space of a hand-breadth.

Röntgen illumination showed a normal condition as regarded both heart and lungs. On the left leaflet of the diaphragm, even at the commencement of inspiration, but still more on deep inspiration, a sharp scalloping was noticeable, corresponding to the part where the patient complained of pain. The explanation of this adhesion lies in the history of the case. It was adjudged that the patient's working power was diminished by 25 per cent.

A year later he was sent to the Charité for renewed observation. He had gone back in the meantime to his old employment of sack porter, but always felt pain in the left breast on severe exertion, less, however, than formerly. On Röntgen illumination the scalloping was much less distinct than before; he was therefore pronounced fit for full work. It was evident that his work had done him good.

CASE 4.—Labourer, æt. 48, admitted May 24th, 1906.

The patient had never been ill. In December, 1901, he fell from a building a distance of 12 ft., sustaining contusions of the chest. After the accident there were signs of right pleurisy. The trade society at first gave him an allowance of 40 per cent. of his full pay; this was reduced after 18 months to 15 per cent., as no signs of the pleurisy were any longer present. The man, however, considered himself no longer fit for work on account of the persistence of the pain. For this reason he was sent to the Charité by the Reichsversicherungsamt for an opinion. On examination no changes were found in the bones of the chest. The circulatory apparatus showed moderate arterio-sclerosis. Over the lung, below and to the right, atelectatic sounds were heard, otherwise the lungs were perfectly normal.

On Röntgen illumination the following was seen. The lung fields were free, the hilus on both sides dis-

tinctly marked. At the heart the right arch pulsed upwards and to the right. In the resting pause the diaphragm showed moderate contours. On deepest inspiration, on the other hand, a semi-circular arching was seen close to the right corner of the diaphragm, which, measured auto-diagraphically, was 4.7 cm. broad, the greatest height being 0.7 cm. The arching was finely indented at its upper border. The condition was considered by myself as adhesion of the diaphragm that had led to considerable limitation of the power of movement of the right half of the part, and that had led to an atelectatic condition of parts of the lower border of the right lung. The situation of the adhesion corresponded to that in which the pain was complained of by the patient.

In my report to the Reichsversicherungsamt in regard to the determination of the amount of the diminution of the capacity for work on the part of the individual concerned, I was able to support my opinion by the photograph taken of the condition. In this case also Röntgen illumination had aided in procuring justice for a man who had received injury from an accident where auscultation, percussion, and palpation had failed to show that there was anything wrong.

CASE 5 was an out-patient, æt. 31. He had served ten years in the East African Guard Troops. During this period of service he had had repeated attacks of malaria, with implication of the liver, as was ascertained by several medical attendants. In later years he had complained of a feeling of pressure in the region of the liver. For about two years he had remarked that he could not breathe properly, and that on drawing a deep breath he felt a pulling, dragging pain in front under the costal arch in the parasternal line. Repeated examinations had revealed nothing, and he had been told that the pains were the remains of his inflammations of the liver.

The man had a washed-out look, but was fairly well nourished. The pulse was 80, and regular, but slightly quicker and smaller on deep inspiration. Nothing could be found wrong in either heart or lungs by percussion or auscultation. The liver projected a finger-breadth below the line of the ribs in the nipple line; the margin smooth, hard, and was somewhat tender on pressure. The spleen was palpable, and reached from the eighth to the ninth rib.

On illumination no changes were observed in either heart or lungs; the hilus was well marked. In the resting position both halves of the diaphragm were equally high, the leaflets equally rounded. On deep inspiration, however, the right half at the cardiac corner remained about three finger-breadths higher up than the other. At the same time a cord-like shadow, getting finer towards the side, was seen springing from the clear base of the right lung and attached just over the cardiac angle of the diaphragm. Here undoubtedly the figure originated in a pleuro-pericardial adhesion, and the atypical movement of the diaphragm in an adhesion connected with this between the pulmonary and the diaphragmatic pleura. Here also the parts that were adherent corresponded accurately with those in which the patient experienced difficulty.

Pleural adhesions had been looked upon here as the causal factor, this diagnosis having been arrived at by the process of exclusion, but only the Röntgen rays could make it certain.

The cause of these adhesions, as no acute disease of the heart or lungs appears in the history, must have lain in extension of inflammatory disease from the liver to the right diaphragmatic pleura, with extension to the pleura pulmonalis and the parietal pericardium.

CASE 6, æt. 59, a hide dresser, who for years had had to work in an atmosphere laden with dust, and for the last six or eight years had suffered from severe bronchial catarrh. For the last two years he had suffered also from difficulty of breathing, associated with a dragging, burning pain over the right costal arch.

The patient was somewhat emaciated, and examination showed considerable emphysema and advanced arterio-sclerosis. On examination by the usual methods nothing could be found in the liver or lungs to explain the troubles.

On illumination the usual signs of emphysema were found, as usually shown by radioscopy, great clearness of both lung fields, with wide intercostal spaces, nearly horizontal course of the ribs, depression and lessened movement of the diaphragm, signs of arterio-sclerosis of the heart, diminished shadow cast by the heart, towards the left, pulsation of the right upper arch, extension of the aortic band in the first oblique diameter.

On deeper inspiration a small, rounded bulging occurred, not quite sharp in its upper border, close to the diaphragm, which in orthographic projection corresponded exactly with the dragging, burning pain spoken of. Here also an adhesion between the diaphragmatic and pulmonary pleura appears to be established by the Röntgen rays. The explanation of the case is similar to that of No. 2, in which pleurisy with adhesions took place in the course of severe attacks of bronchitis, but which could not be determined by percussion and auscultation. The adhesion of the diaphragm is here, of course, only an interesting complication, which took the veil from the causes of an otherwise unexplainable pain.

CASE 7, a labourer, æt. 40, was a patient of the Poliklinik with struma, in whom, on Röntgen illumination, some changes of the cardiac shadow were thought to be present. The patient did not complain of any heart trouble. The usual examination, with the exception of acceleration of pulse, had revealed no changes in either the heart or lungs.

The X-ray examination also showed no changes, the normal contours of the diaphragm being present on medium inspiration, but, on very deep inspiration, a semi-circular bulging with an eaten-out appearance was seen immediately to the right of the cardio-diaphragmatic angle. The bulging was plainly seen in all directions of illumination, the most distinctly, however, in a mid-position between a dorso-ventral direction of the light and the first oblique diameter. A plate was taken in this position in the pause of respiration. The patient, on inquiry, then stated that some years before he had had an attack of right-sided pleurisy, that this had left nothing behind, but that frequently, on very deep inspiration, he had experienced a feeling of pressure in the lower part of the chest on the right side. A diagnosis of adhesion of the diaphragm without any other affection of the chest was free from all objection. As regards ætiology, the old pneumonia comes into question, in which it is very probable some pleurisy was mixed up, either of the pulmonary or diaphragmatic pleura.

I would sum up the results of the observations on the seven cases as follows:—(1) Röntgenoscopic examination of the chest is desirable in all affections of the thoracic organs. They become a necessity on diagnostic, therapeutical, and social grounds, when an ordinary examination fails to reveal the causes of the affection in question.

(2) Adhesions of the diaphragm can be demonstrated by the Röntgenoscope alone, when they lie outside the region of the pleura.

(3) Illumination is especially necessary when affections of the heart or lungs, or injuries to the chest, have preceded those that are the objects of inquiry.

## SOME REMARKS ON THE PERITONEUM AND PERITONITIS. (a)

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ALL that is attempted in the present paper is the recapitulation of some of the established facts as to physiological processes in the peritoneum, and a cursory examination of modern methods for their practical application. If thereby, discussion is provoked, a good purpose will be accomplished. Surgical experience, in our early days, is partly derived from

(a) A Paper read before the Cork Medical and Surgical Society, October, 1909.



the individualities of our teachers, partly from the accumulated wisdom of tradition. But each of us acquires also, a growing mass of practical experience; we acquire it unconsciously, and have not always the leisure for extracting its full value by revision and sifting.

If when waiting to begin a laparotomy for "general peritonitis," we ask ourselves "Why am I going to open this abdomen?" The answer will probably be brief and to the point: "Because I know its right"; but the rational reply will have to be postponed to some such free moment as the present.

One of the most recent text-books of surgery in the German language, (1) begins its account of the treatment of peritonitis, under the heading "symptomatic," by recommending opium, and forbidding aperients. Of course, the authors go on to describe the great reduction of mortality effected by early surgical intervention; but still, *there stands* "masterly inactivity," as a possible attitude for a modern surgeon towards peritonitis.

Why is it not our attitude? Why do we open the abdomen at the earliest possible moment in every case of acute peritonitis?

The superficial area of the peritoneum is scarcely less than the whole skin surface of the body. It is no surprise to us that the quantitative toxæmia of even a mild infection, affecting a large area of the body—say, in a case of extensive scalding, or in pityriasis rubra—should be a very grave and serious matter.

It is surprising on the other hand that widespread infection of the peritoneum—a tissue which does not share the advantage of the skin in shedding a large part of its discharges outside the body—should not be even more rapidly, and certainly fatal.

We know with what extreme rapidity foreign particles find their way from the cœlomic cavity into the lymphatic, and even into the hæmic, circulation. Blood corpuscles left free in the peritoneal cavity of a dog reach the lymphatics and anterior mediastinal glands in less than an hour. (2) Five minutes after the injection of a large dose of typhoid bacilli into the peritoneal cavity of guinea-pigs or rabbits, the organisms can be recovered from the blood drawn from the ear. (3) Iodine can be found in the urine of guinea-pigs fifteen minutes after its introduction into the peritoneum. (4) Rice-flour particles can be recovered in blood from the pinna one hour after its injection into the peritoneum; (5) inert particles have been found in the spleen fifteen minutes, (6) and in great numbers, two to four hours after introduction. The old idea of the peritoneum as a huge lymphatic space, communicating directly with the lymphatic circulation by "stomata" and "stigmata," the descriptions and figures of which were familiar to us as students (7)—has been exploded by more recent work. (8) (9) It is now generally recognised that all particulate and a great deal of the fluid absorption from the peritoneal cavity takes place *via* the diaphragmatic lymphatics, but Wegner's (10) observations on absorption through the lymphatics of the meso-rectum, gastro-hepatic, and other omenta—have not been specifically disproved. Indeed, carmine, whilst chiefly finding its way through the diaphragm, diffusely stains the parietes. Actinomyces, injected into the cavity, are found studded thickly over the diaphragm, whilst a few occur in the pelvis, none in the walls, but plenty in the mesentery.

MacCallum (2) has described cilia on the endothelial cells, but he ascribes a very important *role* to mechanical aspiration by the diaphragm, in determining the flow of fluid, and movement of solid, particles towards the upper part of the abdomen; and to the rhythmical contractions of its interlacing muscular fibres in promoting their passage into the lymphatic circulation through the tenuous endothelial covering of the lymphatic lacunæ and spaces, lodged between them.

One hour suffices for leucocytic reaction in an irritated peritoneum; thenceforward the vast majority of absorption of solid particles takes place after

phagocytosis; bacteria, blood cells, and inert particles, such as carmine, are all engulfed, enter the lymphatic stream and reach the mediastinal lymph-glands, or find their way *via* the thoracic duct into the blood stream.

There is, however, one very important factor which the work of Durham, (11) and more recently that of Buxton and Torrey, (12) have demonstrated, and which operative observations suggest, viz., that the great omentum may act as a most efficient filter, as a natural inhibitor of the usual trend of bacteria towards the diaphragm, where immediate transference to the circulation would be their fate. Durham speaks of the omentum as *par excellence* the seat of election for removal of leucocytes from the peritoneum during infection. Others (19), (20), (21) also have demonstrated its protective *role*, and some even consider it the main path of absorption. (13) The peritoneal fluid may be sterile, and yet the omentum contain bacteria. Here I may mention a most interesting observation of Buxton's, (6) that the sera of immunised animals are not more bacteriolytic, but that leucocytosis is, in them, much greater, than in control animals. Fluids are probably absorbed from the cœlum both by the lymphatics and veins, and the rate may be remarkable. A dog can absorb from its peritoneal cavity in one hour, an amount of blood-serum equal to one per cent. or even eight per cent. of its body weight. (14) Absorption is dependent on the pressure exerted by the abdominal muscles—not only their normal "tone," but also their rhythmical respiratory contractions; upon the pump-like action of the diaphragm; upon peristalsis, in so far as it opposes the action of gravity upon the free contents of the sac; and lastly upon the vitality of the endothelium.

Some writers have thought it impossible to increase the rate or amount of absorption usual in physiological conditions, but it is now fairly certain that the rate and amount are both increased (4) in the early stages of infection. Diminution in the amount may be produced by chill, (15) (16) which inhibits peristalsis and contracts the blood-vessels. Heat applied externally also has the same effect, (17) probably for similar reasons. Drying (18) too, leads to diminution. For protection against infection from the peritoneum there is almost entire dependence on phagocytic action. The peritoneal fluid may possess bactericidal properties, which are indeed sometimes capable of "explosive action" (3) in the immediate destruction of bacteria. Whilst there is often an initial leucopenia, it is quickly followed by a leucocytosis. The white cells invade the peritoneum in enormous numbers and become very actively phagocytic in a few hours. There is a good deal of difference of opinion as to the source of the phagocytes and as to the exact character of those evincing the highest engulfing properties; the truth being that for different organisms, and at different stages of the process of infection, different orders of leucocyte, and even of endothelial and connective tissue cell, are most potent.

We may take it that bacteria which survive the immediate lethal action of the peritoneal fluid are taken up by leucocytes and transported *via* the diaphragm to the lymph glands, the blood stream and the tissues, there to undergo bacteriolysis; others, meshed in the fine film of fibrin, with which we are familiar as dulling the normally shiny surface of the peritoneum, or actually affording a visible coating of lymph, are bound thereby to the great omentum, which is quickly crammed to distension with actively phagocytic leucocytes; by their agency the micro-organisms are transferred to the efferent lymph channels.

(22), (23) Many methods have been proposed and practised to promote leucocytosis. Mickulicz injected nucleinic acid; Chantemesse and Kahn used a prophylactic injection of sodium nucleinate, Borchardt and Schmidt used horse-serum; simple NaCl, is credited with similar properties by many surgeons. It appears from the work of Dudgeon and Sargent that in many cases of peritonitis, rapid mobilisation of defensive

phagocytes is effected by the agency of an innocuous but fortunately almost ubiquitous, organism, the *staphylococcus albus*; this organism which is probably an inhabitant of the intestine, given law enough, will prepare an adequate defence against almost any invasion however virulent. Preliminary injection of this organism will afford protection against a virulent culture of the colon bacillus injected twenty-four hours later. Unfortunately, it is not enough that, given time, the leucocytes will probably succeed in removing all bacteria from the peritoneal cavity. Often they are not "given time." Absorption of bacterial toxins takes place sometimes with all the rapidity indicated above for experimental observations. Before certain strains of *Streptococcus*, and sometimes before the *B. pyocyaneus*, the leucocytes are powerless. The toxins have been shown to exert a special deleterious action on the bulb, and thence on the cardio-vascular system, more particularly in the splanchnic area, plethora of which leads to cessation or diminution of fluid absorption by the ordinary route. If, however, under these circumstances the endothelial cells are devitalised or shed, or mechanically removed, direct absorption into the subserous vessels is permitted, and may proceed with fearful rapidity. Thus even the temporary gain from stasis is neutralised.

The extraordinary complex conditions controlling osmosis and dialysis (24) are easily and too often disturbed in some fashion adverse to the organism as a whole, with reference to these poisons. One action of the toxins is to paralyse the plexus of Auerbach (25) in the intestinal wall, the muscular tissues of which are already handicapped by oedema and venous congestion; in consequence, peristalsis fails. That very "plastic exudate" which is the second line of defence in all cases of local infection of the peritoneal cavity, by agglutination of adjacent structures and isolation of the infective focus, serves to hinder peristalsis still further. This, by inhibiting intestinal movements, may stay the spread of infection, but it permits stagnation of the contents of the gut, and that in itself constitutes a grave danger. We can guess at the meaning of this danger when we think of Starling's experiments on the elaborate chemico-nervous mechanism controlling gastro-intestinal digestion, and the disasters that follow upon its derangement.

With comparatively few exceptions, clinical indications of the nature of the infecting organisms are not available at the time of operation. (26) Some authors (27), (28) have thought they could distinguish a streptococcal from a coli infection; others deny the possibility. One (29) thinks a streptococcal peritonitis is generally without distension; another (30) thinks distension of the abdomen the "most important diagnostic sign of peritonitis." These are the vague terms used by those who seek to correlate clinical indications with bacteriological findings. Even the appearances met with within the abdomen are not an absolute guide. When a child's abdomen is found full of buttery pus, or of material like "beef-tea," (31) one may suspect the presence of the pneumococcus, but whether or not it is present in pure culture is quite uncertain. The pronounced odour with which we are so familiar in cases of appendix abscess, may indicate the presence of *b. coli*, but it does not exclude the staphylococcus or even the dire *b. aerogenes capsulatus*; the elusive anaerobic organisms whose toxins are accused of such intense virulence, give no unmistakable sign of their presence. The locality of the source of infection, does afford some hint as to the probabilities of finding, or not finding, certain organisms; it is little more than a hint.

When the peritonitis is due to perforation of the stomach or duodenum, the infecting organisms are very often of low pathogenicity. Towards the lower end of the small intestine and in the large, the organisms liberated by perforation, or permitted to reach the peritoneum through macroscopically intact walls—a possibility well-established (33), (34), (35)—may be of very varying virulence; different combinations of organisms, as, for example, the association of streptococci with colon bacilli, or differences in the strain due

to intra-intestinal conditions, may account for any degree of menace from a mild irritation up to an invasion too violent for the normal process of defence to withstand unaided and too sudden for the assistance of art to be invoked. Infection reaching the peritoneum from the female generative organs is often of low virulence, sometimes the gonococcus is alone concerned, or it is associated with other organisms, or it is outrun by them before the serosa is reached. On the other hand the peritonitis of puerperal fever is perhaps as virulent as any infection ever seen. From perforation of a gall-bladder the anticipations simulate those from perforation of gut somewhat lower than the opening of the bile duct in the duodenum. Infection from without, as by stab-wound, or by injury in instrumental efforts to procure abortion, or during operative measures, may vary in virulence, just as with infected wounds elsewhere.

Even shed blood in the peritoneum does not, as Dudgeon and Sargent have shown, remain sterile. The *Staphylococcus albus*, generally the surgeon's friend, may strain the compact by its demands. The different modes of origin, the different infective agencies, the different stages of the disease at which intervention becomes possible, the different conditions actually found, all demand appropriate treatment. The only law applicable is an injunction to avoid all golden rules.

Certain points then, it seems to me, are worth keeping in mind clearly.

The amount of peritoneal fluid normally present is minimal. It is supplied in the main by transudation from the great omentum, and is constantly aspirated towards the dome of the diaphragm where it passes through the endothelial membrane into the lymphatic spaces and channels back to the circulation. The amount of this fluid is considerably increased in the presence of an infective agent, and moreover its cellular phagocytic content is raised to an enormous extent. This cellular increase is purely protective; it is due, partly to proliferation of the endothelium itself, but mainly to the white blood corpuscles. During the initial stage of increased fluid exudation, there may be a leucopenia. (11), (32) All cells save the lymphocyte are balled and clumped and become adherent to the peritoneal surface, chiefly of the omentum. Phagocytosis is active except in the presence of organisms of high virulence. An hour later the polymorphonuclear leucocytes appear on the scene, and their numbers increase for fifteen hours or so, the fluid becoming turbid in consequence. The polymorphonuclear cells, after active phagocytosis, are themselves ingested by macrophages of endothelial origin. In some cases death may ensue without, to all appearance, more than slight changes in the peritoneum, the "collapse" to which the fatal result is attributed being no more than the expression of an intense toxæmia, which the defensive processes have been powerless to inhibit.

Denudation of the tissues underlying the serosa, affords a nidus for the unhindered development of bacteria. Again, virulent substances are produced as bye-products in the process of normal digestion; the body is normally protected against them, at any rate in part, by the activity of the bacterial inhabitants of the alimentary tract. When peristalsis is impaired or abolished, when the walls of the gut are congested, and infiltrated, when the conditions permit multiplication of the contained organisms, and increase of their virulence, it is to be expected that toxic substances will be produced in quantity and quality exceeding the normal, whilst only a partial compensation can be expected from concomitant decreased activity of the normal channels of absorption.

Every surgeon is familiar with the heart-sinking he experiences in seeing his patient begin to vomit the foul brownish-black, grumous fluid which regurgitates in late stages from the intestines to the stomach.

#### TREATMENT.

The object of treatment should be:—

- (1) To intervene at the earliest possible moment, with the object
- (2) of removing the source of infection,
- (3) to damage and disturb the peritoneum as little as possible in doing this,
- (4) to remove as few as possible of the still-active phagocytic cells,
- (5) to divert the peritoneal current from its usual course to the diaphragm, towards the exterior through appropriate apertures, as long as active fabrication of toxins and multiplication of organisms are proceeding,
- (6) to fill the peripheral vessels, in compensation for splanchnic stasis; to dilute the toxic contents of the blood and promote excretion by the kidneys and thereby elimination of toxins and even of bacteria;
- (7) to promote evacuation of the intestinal contents. This may be of greater importance, in view of their highly noxious character, than the avoidance of further spread of the infective agent by peristalsis; indeed, it is chiefly requisite when the peritonitis is already diffuse or general;
- (8) To put confidence in the extraordinary defensive scavenging and recuperative powers of the peritoneum, when it is given a chance.

Not all these recommendations can be put into practice simultaneously, nor is it essential they should be; some are definitely conflicting, and the indications for selection must be matter for each individual case, for experience and for prompt judgment, too often upon inadequate data.

Where the peritonitis is diagnosable only vaguely as "peritonitis" every surgeon operates. As an adherent of early operation, I extend my opinion to include those local, or localised infections the source of which can be recognised with reasonable assurance. Without denying, for a moment, that circumstances may make immediate operation inexpedient, I regard those circumstances as to be deplored. I have never had to regret early operation: I confess, with sorrow, I have too often had to lament hesitation and delay.

With regard to damaging the peritoneum, one is often in a cleft stick. Not only must it be remembered that to detach the film of leucocytes, fibrin, and proliferating endothelial cells, is to make a breach in the continuity of the natural defences, but also, that we increase thereby the menace of subsequent adhesion; adhesion which may result either in acute angulation or in chronic fibrous junction. When, owing to the difficulty in finding or reaching the source of infection, or owing to difficulties with the anæsthetic making relaxation impossible, or owing to imperfect assistance, the small intestine is allowed to escape, its reposition may be a matter of great difficulty, necessitating very firm handling. This may easily lead, especially in the case of children, to hæmorrhages into the walls, and worst of all to splitting of the peritoneal coat along a whole loop—a disaster quite serious enough to rob the patient of the small chance already remaining. It is extremely difficult to suture such splits in the serous coat, with accuracy, even after letting the contained gas out of the affected loop, the tissues being too soft and infiltrated to hold the silk.

To let out from the lumen a big \*dose of bacillus coli into a peritoneal sac, already taxed to its uttermost in dealing with another infection, is equivalent to a death sentence.†

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(To be continued.)

## OPERATING THEATRES.

### MIDDLESEX HOSPITAL

WHEELHOUSE'S OPERATION FOR STRICTURE.—MR. JOHN MURRAY operated on a man, æt. 42, who had been admitted four days previously suffering from stricture of the urethra complicated by retention of urine. The patient stated that he had had an attack of gonorrhœa twelve years previously, which had lasted a week. He had had no further trouble until twelve months ago, when he began to have difficulty in passing water, and he noticed that he passed it in a smaller stream than usual. Six months ago he found that his urine began to dribble away constantly, and this condition had continued ever since. He came up to the out-patient department about six weeks before. An unsuccessful attempt was made to pass an instrument into the bladder, and the patient was then advised to come into the hospital. From the date of his attendance in the out-patient department up to the time of his admission he had never been able to pass his urine in a normal manner, but it had been constantly dribbling away. On admission, the bladder was distended, and reached just below the umbilicus. An attempt was made to pass various instruments, including a small silver catheter and a filiform bougie, but without success. As the patient was not in any pain, and there was no indication for giving immediate relief to the retention, which had evidently existed for the last six or eight weeks, the patient was ordered a purgative and a hot bath night and morning. Three days later another attempt was made to pass an instrument through the stricture, but this also failed. It was therefore decided to operate. When the patient was under the anæsthetic a final attempt was made to pass a catheter, but this being unsuccessful, the man was placed in the lithotomy position and a Wheelhouse's staff passed down to the stricture. A median perineal incision was made, and the urethra opened on the staff. On separating the edges of the divided urethra, the proximal opening was easily found, and about half-an-inch lower down the urethra was almost occluded by a dense annular stricture. Wheelhouse's probe pointed director having been inserted, the stricture was divided and a gorget introduced into the bladder, when a large quantity (about 20 oz.) of clear normal urine escaped. A full-sized gum elastic catheter was introduced through the meatus and passed into the bladder. It was then tied in, the perineal incision was closed over the catheter by silkworm-gut sutures passed deeply into the corpus spongiosum, and the wound dressed.

Mr. Murray commented on the fact that cases of stricture admitted as in patients appeared to be of much less frequent occurrence now than formerly, and the complicated cases of stricture, such as cases of extravasation of urine and strictures associated with perineal fistulæ were of infrequent occurrence. He was of opinion that this was due to more efficient

treatment of gonorrhœa and to the improvements in the methods of treating stricture, more especially with regard to the sterilisation of all instruments used for the purpose of dilating the stricture. The case under consideration called for treatment on account of two conditions—namely, retention of urine and a stricture. With regard to the retention of urine, considering that it had continued certainly for two months, that the patient was not in pain, no immediate relief was necessary. When he first saw the man he hoped that the treatment adopted—namely, rest in bed, hot bath night and morning, and saline aperients—would cause sufficient relief of muscular spasm to enable an instrument to be passed. He pointed out that cases of stricture complicated by retention are usually associated with spasm of the urethral muscles, and that where it is impossible to introduce an instrument when the patient is first admitted, after a few days one can be introduced without any difficulty, and this line of treatment should, where possible, be adopted. With regard to the choice of operation, there could be no doubt, he thought, that Wheelhouse's operation was the one indicated as affording relief to the retention and stricture at the same time. With reference to the operation, there were two points which struck him as interesting. One was in regard to the stricture: although it was very tight, it was circumscribed, the urethra, except at one point, presenting a normal appearance; the other was the fact that the urine which was drawn off was perfectly clear and showed no sign whatever of decomposition or evidence of cystitis, which, he thought, still further goes to show that such complications are caused by the passage of imperfectly sterilised instruments, and not by infection along the urethra. He said that the difficult part of Wheelhouse's operation often was finding the proximal end of the urethra; in this case no such difficulty was experienced, partly because the stricture was localised and the urethra healthy in the rest of its course. With regard to closure of the wound, he thought this was one of the important points in the obtaining a satisfactory result. The ideal method would be to suture the urethra over the catheter with buried sutures, but the danger of slight septic infection and subsequent trouble from the buried sutures was a great objection to adopting this method. He had tried it on several occasions, but had abandoned it. In this case the wound was closed completely by silkworm-gut sutures passed deeply, and he was led to adopt this course because of the apparent absence of any septic infection of the urethra, and he hoped by this means to obtain primary union, as he had obtained in several previous cases. Where there was obviously septic infection present, and especially where the bladder had become infected, he advised leaving the perineal wound partly open, closing the upper and lower extremities of the wound with silkworm-gut sutures, and packing the centre with sterilised gauze.

He said that if all went well the catheter would be left in for ten days and then withdrawn, after which a silver catheter would be passed every second or third day. When the patient leaves the hospital he will be advised to attend the out-patient department at first once a week to have an instrument passed.

## TRANSACTIONS OF SOCIETIES.

### ROYAL SOCIETY OF MEDICINE.

#### SECTION OF THE STUDY OF DISEASE IN CHILDREN.

MEETING HELD NOVEMBER 26TH, 1909.

Dr. PORTER PARKINSON in the Chair.

Dr. A. E. GARROD showed a case of multiple peripheral neuritis in a child, æt. 8. The child was quite healthy until March, 1909, when she passed involuntarily a stool containing several ounces of blood. This was preceded by an attack of abdominal pain. A similar attack occurred in May, and several others later. When admitted to hospital on September 16th,

she was a well-nourished child; good mental condition; marked loss of power in both upper limbs from deltoid downwards, and double wrist-drop; muscles of lower limbs weak; no tremor; sensation unimpaired; other systems normal. Electrical reaction showed muscles of all extremities with reaction of degeneration (except flexors and special muscles of thumb and little finger). Blood examination: red corpuscles, 4,984,000; hæmoglobin, 94 per cent.; white cells, 10,500. No cause for the condition was discoverable.

Dr. G. A. SUTHERLAND regarded the case as one of special interest, and thought a certain positive diagnosis was not possible.

Dr. E. I. SPRIGGS referred to two similar cases shown at the last meeting.

Dr. ROBERT HUTCHISON showed two cases, one a female child, æt. 9, with cirrhosis of the liver. There had been swelling of the abdomen for one year; no previous illness of importance. Two still-births preceded this child. There were snuffles as a baby. The liver was enlarged and irregular, and the spleen considerably enlarged; some ascites; the child had a cirrhotic facies. Dr. Hutchison took the view that the condition was due to syphilis, and stated that a positive vasomen reaction had been obtained.

The other case was one of unicdactyly in a male, aged 13 weeks. The small digit only was present on both hands and both feet. The child was otherwise normal. The child's father, two uncles, and an aunt are similarly affected, as also the grandfather and his brother. A daughter of the father's sister also exhibits the condition.

The Chairman, Dr. Shuttleworth, Dr. Chapman, Dr. Sutherland, and Dr. Garrod discussed the cases.

Mr. O. L. ADDISON showed a case of congenital enlargement of one limb occurring in brother and sister, æt. 9 and 5 respectively. The boy's arm, shoulder, and hand were enlarged, and there was one inch increase in length.

In the girl the enlargement was in the left leg, which was an inch and three-quarters increased in length. The calf was relatively larger than the thigh, and was hotter than the rest of the limb.

The cases were discussed by Dr. Parkes Weber, Mr. Mummery, and Dr. Garrod.

Dr. R. C. JEWSEBURY exhibited a specimen of an infantile heart showing nodules on the endocardium. The specimen was from a child, aged 4 months, who died from broncho-pneumonia. No cardiac lesion was detected during life. Post-mortem, a large number of wart-like nodules were found, especially on the mitral and aortic valves, a few also on the other valves, and on the septum of the foramen ovale. Microscopical sections through the nodules showed a connective tissue substratum supporting a layer of epithelium. There were no signs of recent or previous inflammation. There was nothing to suggest that the nodules were "vegetations," and it was stated that the condition occurs normally in the infant heart.

Dr. SPRIGGS regarded the nodules as hypertrophy of the little nodules usually seen in infants' hearts.

Dr. ROLLESTON, for Dr. Carpenter, exhibited a specimen of compression of the trachea by the enlarged thymus. The specimen was removed from a child, 10 months old, who died after an illness of less than 24 hours, which began suddenly with quick breathing and sickness. The temperature reached 103°, and the respiration rate was 80. During life there was recession of the intercostal spaces and embarrassed breathing. The specimen showed a large thymus pressing on the trachea, which was much narrowed from before backwards. The lungs showed evidence of death from asphyxia. The liver and spleen showed some fatty change, but the other organs were normal. The case was shown as positive evidence that an enlarged thymus may cause death.

He also showed a microscopical section from the liver of a case of icterus in an infant. The specimen showed a normal condition of the liver.

Mr. LOCKHART MUMMERY read a paper on a case of STRANGULATION OF THE SMALL INTESTINE by a band in a child, aged 15 months. The child had acute obstruction, which developed suddenly, and was

operated upon within 9 hours of the onset of symptoms. A tumour which was thought to be an intussusception was distinctly felt in the right side of the abdomen. The child had been operated upon for intussusception when 5 months old. On opening the abdomen a loop of small bowel was found acutely strangulated by a narrow band. The band was divided, and the abdomen closed. The child made an uninterrupted recovery.

# ROYAL ACADEMY OF MEDICINE IN IRELAND.

## SECTION OF SURGERY.

MEETING HELD FRIDAY, NOVEMBER 19TH, 1909.

The President, J. LENTAGNE, P.R.C.S.I., in the Chair.

THE PRESIDENT said that last year, in opening the session of the Section, he had spoken of the "present position and future prospects of the Academy," and had then been compelled to draw a rather gloomy and depressing picture. He had had to deplore the indolence and apathy which, in his opinion, were steadily destroying the life of the Academy. He thought he could not do better, in opening the present session, than return to the subject. Looking back over the work done during the past session, he was sorry he could see no evidence of improvement in respect of attendance. The number of total attendances at the six meetings of the Section had been 152, or an average of about 25 at each meeting, as compared with 167, or an average of about 28 the previous session. An analysis of the attendances showed that the Fellows had been a little more attentive in the past session, but it was a curious thing that no attendances were recorded by students, as against 21 in the previous year. He was, however, glad to say that the record of work done was a much more cheerful one. During the past session they had had many valuable papers, and many cases of extreme interest had been exhibited, which made him all the more surprised that the attendances had been so small. He considered that the record of papers and exhibits brought forward was one of which any Society like theirs might well be proud, but small, in view of the fact that there were over seventy men in Dublin engaged in the teaching and practice of surgery, as well as hundreds of students to whom the meetings of the section should be of great importance. He asked those present to assist in improving this state of affairs.

### OPERATIVE TREATMENT OF FRACTURE.

Mr. R. LANE JOYNT read a paper on above. He pointed out the result of X-ray examination of united fractures of the femur which had been treated by the common methods showed in many cases an amount of deformity which was little short of that seen in a number of museum specimens which were formerly regarded as examples of mal-union. The functional result in most of these cases was very bad. The only way in which shortening could be prevented, and the fragments got into perfect line, was by operation. Even when complete asepsis was not obtained, suppuration was usually slight, and the results were much better than when the older methods were employed. A striking feature after the fixation of the fragments was the rapid disappearance of pain. He then described minutely the details of the operation for wiring, and of that in which Lane's steel plates are used. He showed a number of instruments which he had found very useful in carrying out these operations.

### OPERATIVE TREATMENT OF FRACTURE, ILLUSTRATED BY X-RAY PHOTOGRAPHS.

Mr. W. I. DE C. WHEELER read a paper on above, and showed four cases where simple treatment had failed, but continuity and union was afterwards established by the use of screws and metal plates. In one case the operation was performed 3½ months after a compound fracture of the tibia and fibula, which failed to unite, and rendered the limb useless. After operation complete union was obtained, the wound, which was partially open, healing, over six screws holding two plates. The fibula was wired. A second case pre-

sented himself for treatment (11 months after the accident) for a false joint of the tibia and an ununited fibula following simple fracture. Firm union was obtained after excision of the joint, and the introduction of screws, wire and plates. The third case was that of the surgical neck of the humerus, with a marked tilt outwards of the upper fragment; the upper end of the lower fragment was embedded in the muscles under the coracoid process. A fortnight's treatment under the guidance of X-rays failed to reduce the deformity. A single plate supported by an encircling wire was introduced to hold the fragments in position. The last case was that of a child, æt. 4, who sustained a long spiral oblique fracture of the femur. Extension under an anæsthetic and immobilisation of the fracture in plaster-of-Paris failed to reduce the overlapping of the bones. Finally, operation was performed, and two plates and three encircling wires introduced. All the wounds healed by first intention.

THE PRESIDENT of the Academy said they had had from Mr. Lane Joynt one of the best demonstrations he had ever seen of the application of practical mechanics to surgery, and he thought it a pity that there were not means of teaching something of the subject to medical students. What had struck him most about the instruments shown was their size and business-like capability. The majority of instruments used for bone surgery were small and incapable. He had often speculated as to how the long American spindle turn-screw could take out a screw that could not be touched with a short one, and until that night he had never heard anything like a reasonable explanation.

Sir THOMAS MYLES recalled the fact that he had in 1884 brought forward a suggestion for the operative treatment of fractures. A quarter of a century had passed since then, and thirty years since the introduction of antiseptic surgery, and yet it was only to-day that the operative treatment of fractures was becoming general. They had taken a long time to get out of the routine methods of procedure. Mr. Joynt had shown them that, even when suppuration ensued, if proper provision was made for drainage, the results of operative treatment were infinitely better than those of non-operative treatment, no matter how well carried out. It was hardly yet time to dogmatise as to which of the operative methods was the best. Most of them had tried the three methods—the method of wiring, the method of the Lane plates, and the Parkhill method, which was capable of being used in many cases with less disturbance than the method discussed that night. The particular advantage of any operative method was not shown so much in fracture of the middle of the shaft of the femur as in fractures in the neighbourhood of the joints. He had had five cases of recent fracture under his care. In the case of a man of fine physique who declined to be operated on, and for whom he did everything to make the non-operative treatment a success, the result was a shortening of 1½ inches, and the patient had not recovered the functional use of the knee-joint. In another case of fracture and dislocation of the head of the humerus, the bone was got back into the socket after tremendous difficulty, and anyone could recognise that nothing but bold operative treatment could possibly have given the man a limb of the least use. After two years the patient had a little stiffness in the shoulder. Comparing the results in operative and non-operative treatment, he did not think anyone would hesitate in advising the operative.

Mr. MAUNSELL cited cases in which he had got good results by wiring, but with great difficulty, whereas when he had used screws and plates in identical cases the operation was not at all a hard one. In a case of compound fracture the plate had come away about five weeks after the operation, but it had not interfered with the result. He did not, however, think that wire had been outdone by screws. Operative treatment was not required in every case, as even in the femur he had got good results with plaster, especially in young people, which he did not think could be improved on by operation. He thought it would be unfair to rush into operation before trying other methods. Cases

such as those mentioned by Sir Thomas Myles might have to be operated on from the first, but he had had recently two cases of fractured femurs, both of which had gone out after treatment with no shortening.

Mr. HAUGHTON said those surgeons who viewed the conditions of fracture through X-ray examination became more and more convinced of the necessity for an improved method of treatment. He held personally that it was even more important to take an X-ray picture after the application of splints than before they had been applied. If the position was not satisfactory they could then proceed to operative treatment. He used a small screw-driver on small bones for fear of splitting, but the long screw-driver was more convenient.

The PRESIDENT said he had been speculating as to how he would treat the case of fracture of the lower end of the femur just above the knee-joint in which they might have one of the fragments presenting backwards toward the skin of the popliteal space. He would like to know what incision Mr. Lane Joynt would propose to make for such a fracture, or in separation of the epiphysis in that situation. He remembered two cases of the kind which had been treated by distinguished surgeons, and the results had been lamentable. He himself believed that a good deal could be done by posture. He had treated cases by keeping the leg bent to a right angle, but the position was extremely irksome, and the results, though very much better than former ones, were not to be compared with what they could now get by suturing or plating. If they were to operate at all in a case of fracture, the sooner it was done the better; delay added to the difficulty of the operation and interfered with the beneficial result. He had found the Parkhill clamp difficult to employ; it left several holes in the skin, and there was always greater danger of sepsis. The greatest danger of sepsis was not during the operation, but during the first week or two after the operation.

Mr. LANE JOYNT, in reply, said that in approaching the knee for a fracture in the lower third, they would have to go from the outer side, and probably apply a plate. It was easier to work from the outer side than from the inner, and he thought also that they would be able so to avoid the capsule of the joint and the prolongation of the synovial membrane. He would not, however, object to opening the joint, as it could be done without necessarily destroying it. If they were going to place a plate on the bone in the neighbourhood of the joint, it should be, if possible, not in a place exposed to friction. He would not use wire there, no matter how tempting it might look. As regards Parkhill's method, he looked upon it as being superseded in some cases; but there were others, notably where they might have a compound fracture of the tibia with excessive suppuration and necrosed bone, in which it would be folly to attempt to suture or screw with Lane's plates, or wire. Wire was not outdone by any means. There were times, as when dealing with fractures in young children, when they should use fine wire. In such cases the shortening would be the same, when the patient was fully grown, as in childhood.

Mr. WHEELER also replied.

#### HARVEIAN SOCIETY OF LONDON.

MEETING HELD NOVEMBER 15TH, 1909.

The President, Dr. CHARLES BUTTAR, in the Chair.

Dr. ALEXANDER MORISON read a paper on the NATURE AND TREATMENT OF ANGINA PECTORIS.

He remarked that if the terms were used comprehensively as applying to all forms of cardiac pain, the condition was not rare, but if limited to classical cases, mostly without valvular disease, we could understand the fact mentioned by Stokes, of Dublin, that he had never seen a case. Dr. Morison, however, would treat the condition more comprehensively, and defined angina pectoris as a painful affection of the heart as a whole, dependent upon disorganisation in

the anatomical character or disorder in the physiological function of one or more of the factors in cardiac action, and associated in some cases with a fear of impending death. He gave a short abstract of the cases as supplying the data upon which he rested his conclusions regarding the nature of the affection, instancing cases both of dextral and sinistral radiation of the pain. The conclusion he arrived at was that the character and situation of the conditions which originate angina vary, and that the heart is, like other viscera, endowed with low sensibility to handling and other modes of external irritation under normal circumstances, may in the presence of lesion of its internal surfaces, or severe stimulation of its nervous endowment by compression or otherwise, reveal evidences of sensibility as well marked as do other viscera in their interior under circumstances which may be regarded as analogous. He argued that even the commencement of referred pain in a peripheral portion such as the arm in no way invalidated the belief that intra-aortic or intra-cardial nerves were not also the seat and site of referred pain.

In speaking of treatment, he divided his remarks into a consideration of the treatment (1) of the attacks, (2) of the conditions which provoked the attack, and pointed out that the majority of cases of so-called vasomotor angina with valvular disease tended to subside without accident so far as the attack was concerned. This was not so with non-valvular cases, which might rapidly terminate fatally, and required, not merely the use of nitrites, but also of morphia, atropin and general anaesthesia for relief and to arrest death. At the close of his remarks Dr. Morison showed a patient upon whom thoracotomy had been performed with benefit for cardiac pain, and an account of whose case has already appeared in the *Lancet* for July 4th, 1908, and November 20th, 1909.

In the discussion that followed:—

Sir THOMAS CLIFFORD ALLBUTT said that, to properly understand the nature of angina pectoris, it was necessary to consider cases that were not complicated. He considered that the cause of uncomplicated cases of angina pectoris was disease of the aorta above the valves, and he thought that the distribution of the radiating pain depended largely on the part of the aorta affected. He thought that there was a pain arising from the heart itself, and situated in the præcordial area, which was quite distinct in character from the pain of a typical angina attack. He insisted on the importance of early specific treatment in cases of angina pectoris.

Sir RICHARD DOUGLAS POWELL considered that cases of typical angina pectoris were due to atheroma and thrombosis of the coronary arteries. He would not class as angina mere aortic pain following exertion. He considered rise of arterial blood pressure an important factor in the causation of angina pectoris, and gave instances of cases in which the development of mitral regurgitation had caused relief from anginal attacks.

Sir THOMAS LAUDER BRUNTON thought that the pain of angina pectoris was partly due to contraction, and he compared the pain to the contraction of a distended bladder. He considered that there was an elusory nerve supply to the heart, and cited the results of experiments on animals in support of this. He thought that the pain of angina pectoris was due in some cases to increase of arterial blood pressure; in other cases spasm of the coronary arteries was an important factor. He laid stress on the importance of careful regulation of exercise in angina pectoris, and also on the advisability of rest after a meal.

Dr. JAMES MACKENZIE thought that the symptoms of angina pectoris should be carefully understood, and that the distribution of the pain should be carefully investigated. He thought that irregularities of the heart were important, and also that great exhaustion of the heart muscle was usually present in angina attacks.

Dr. LEES said that many of the attacks of so-called angina pectoris were not really typical. He thought that a very important confirmatory physical sign was a dilated aorta, and emphasised the importance of a careful examination by percussion. He considered that excessive indulgence in tobacco smoking was a



very important factor in the causation of angina pectoris. He said that investigation of the nerve plexuses about the aorta was very necessary before the pathology of angina pectoris was properly understood.

Dr. COLBECK considered that "pain in the heart" was the main factor in the symptoms of an anginal attack. He thought that any theory of explanation of the condition must account for the fear of impending death.

Sir JOHN BROADBENT said that there was a great deal still to be learnt about the ætiology and pathology of angina pectoris. He thought that most attacks were due to a spasm of the vessels induced by cold and exertion.

Dr. BEZLY THORNE thought that distension of the heart was the true cause of angina pectoris. He spoke of the presence of tender areas at the apex beat, over the third left costal cartilage, and over the lower part of the sternum. He advocated the use of blisters here in the treatment of the condition.

Dr. EWART considered that the influence of respiration on angina pectoris was not sufficiently taken into account. He thought that it was possible that spasm of the diaphragm might, in certain cases, account for some of the pain present in an anginal attack.

#### GLASGOW OBSTETRICAL AND GYNÆCOLOGICAL SOCIETY.

MEETING HELD NOVEMBER 24TH, 1909.

Dr. MUNRO KERR, President, in the Chair.

PROFESSOR MURDOCH CAMERON and Dr. ROBERT JARDINE showed some interesting cases, and the latter gave a practical

#### DEMONSTRATION OF THE OPERATION FOR CÆSAREAN SECTION.

Professor Cameron was the first member of the profession to perform Cæsarean section in Scotland, and since that time it has become a common operation by the members of the maternity staff, scarcely a week passing without one or two cases.

Dr. Jardine performed the operation with his usual amount of skill, and seems to be as much at home with Cæsarean section as the general practitioner does with an ordinary labour, and on one occasion Dr. Jardine had the experience of performing this operation three times in 24 hours.

The operation seems to the general practitioner a very formidable one, but when he has seen one performed there is no reason why in the wayside hamlet he should not undertake it himself. The most necessitous part of the whole proceedings seems to be in the need of a good assistant, and this the country practitioner generally obtains from his nearest professional brother, or from the district nurse who usually has a maternity training.

#### LIVERPOOL MEDICAL INSTITUTION.

MEETING HELD NOVEMBER 18TH, 1909.

The President, Mr. T. H. BICKERTON, F.R.C.S., in the Chair.

MR. THOMAS GUTHRIE read a note on the removal of a tooth-plate which had remained impacted in the œsophagus for three weeks, by means of Bruning's œsophagoscope. The instrument was demonstrated, and radiographs by Mr. C. Thurstan Holland, showing the tooth-plate in the œsophagus were exhibited.

Dr. W. B. WARRINGTON made some remarks on the results of treatment in some of the grave cases of diabetes mellitus. His statement was illustrated by lantern slides of charts showing various diets and the results of usage.

Dr. F. H. BARENDT showed a child suffering from erythema multiforme.

Dr. NATHAN RAW showed the brain of a child, æt. 12½, who had died from hæmorrhage into the right lateral ventricle.

Dr. BRIGGS read a paper on the

RESTORATION OF THE FEMALE PELVIC FLOOR BY OPERATION OR AN EXTENDED PERINEORRHAPHY. The object of the paper was to urge, on anatomical and clinical evidence, that:—

(a) Reparable damage (mainly obstetrical) to the pelvic floor, calls for a prompt remedy during the parous period of life.

(b) Irreparable atrophy of the pelvic floor is a consequence of the still too frequent postponement of radical operative treatment until the post-parous period of life.

(c) Modern advances in anatomical knowledge and in surgical methods justify an earlier restoration of the pelvic floor.

(d) Loss of tissue by excision of any portion of the vaginal walls is unnecessary and no longer an argument against operation during the parous period of life.

(e) A safe, simple, and effective operation was described.

The paper was discussed, and Dr. Briggs replied.

#### CENTRAL MIDWIVES BOARD.

A PENAL SITTING WAS HELD ON DEC. 1ST AND 2ND.

Dr. CHAMPNEYS in the Chair.

#### PENAL PROCEEDINGS.

THIRTY women were cited to appear before the Board, of whom 11 were struck off the Roll, 5 were censured, and 6 cautioned; 2 were allowed to retire voluntarily, and in the remaining 6 cases sentence was deferred for three months, pending further evidence from the local supervising authorities.

The Hertfordshire County Council, who sent up two cases, sent also their Clerk, Mr. Longmore, with Miss Burnside, Inspector of Midwives, to ask the Board to reconsider their decision of October 7th—viz., "That local supervising authorities be not allowed a hearing in penal proceedings before the Board except by special leave of the Board, which may be given when, in the course of such proceedings, charges are made against an authority or its officers, to which an answer may reasonably be expected." Mr. Longmore pointed out that his Council were anxious to help the Board in the administration of the Act, and they felt that the person making the charge against the midwife in the first place—i.e., the L.S.A. inspector—should be the person to make the charge before the Board; the Council further felt it was but right that the midwives charged before the Board should be given a chance of appearing in person. The Council were therefore ready to pay their expenses, and the expenses of necessary witnesses, in order that the whole thing might be done in as fair a manner as possible. He asked the Board, on behalf of his Council, to give this suggested procedure their careful consideration.

In dealing with one case the CHAIRMAN drew attention to its educational value. The midwife, who had carefully abstained from making any vaginal examinations, had been eight hours at a labour before discovering an abnormal presentation, when she sent for medical help. The doctor found a transverse presentation, the child impacted, and a hand presenting. Dr. Champneys cited this case as a proof that those who advocate external examination *only* are responsible for the lives of a good many infants.

## CORRESPONDENCE.

### FROM OUR SPECIAL CORRESPONDENTS ABROAD.

#### FRANCE.

Paris, Dec. 5th, 1909.

#### IODINE IN SURGERY.

IODINE, as is well known, is a powerful antiseptic, but little toxic, and much cheaper than certain agents in current use, as oxygen water for instance; hence its employment in surgery is gaining rapidly in favour.

Dr. Lance gave recently, in the *Gazette des Hôpitaux*, a few practical indications which merit reproducing.

One of the most active effects of iodine resides in the vapour it gives off at the temperature of the body, as obtained, for example, when iodine cotton wool is applied to the skin. It is in this form that iodine penetrates most easily the tissues. However, its employment under this form is very limited.

The following are some of the principal formulæ used in surgery:—

Iodine, 1 grm.  
Iodide of potassium, 2 grm.  
Water, 300 grm.  
(Lugol-Gram solution.)

Tincture of iodine, 6 grm.  
Water, 1,000 grm.  
(No. 1, strong.)

Tincture of iodine, 3 grm.  
Water, 1,000 grm.  
(No. 2, moderate.)

Tincture of iodine, 1.50 grm.  
Water, 1,000 grm.  
(No. 3, weak.)

For many years the solution of Lugol-Gram was employed for sterilising catgut. Claudius, of Copenhagen, was the promoter of this method; gum catheters and bougies are also left in this solution for five or six hours before using.

To disinfect the hands of the operator, Dannreuther advises plunging the hands for one or two minutes, after a good washing in soap and hot water, in the watery solution No. 2. The hands are but slightly coloured, and if necessary the stain can be easily removed with a weak solution of ammonia.

Painting the skin with tincture of iodine rapidly disinfects, and is of great value in cases of more or less septic wounds or sores of the hands, feet, legs, and scalp of working men. By applying the tincture around the edges, the wound can be sutured with confidence of obtaining reunion by first intention. The same treatment is now generally used for local disinfection of the skin before operating. By previously washing with soap and water, and rubbing with ether to remove the grease, the penetration of the iodine is much facilitated. For Grossich, a simple application without any preliminary, is quite sufficient.

Applications of tincture of iodine for erysipelas are very effective; the same may be said for the treatment of lymphangitis or buboes. In hygroma, synovitis, arthritis, tincture of iodine acts as a revulsive. Better results, however, would be obtained by the solution of Elsberg:—

Iodine, 2 grm.  
Ether, 5 grm.  
Proof spirit, 5 grm.

A number of infections of the skin are treated at present by applications of tincture of iodine. Boils are arrested in their development by a mixture of iodine and acetone:—

Iodine, 4 grm.  
Acetone, 12 grm.

while anthrax is treated successfully with interstitial injections of the tincture of iodine after incision.

As a parasiticide for malignant pustule, actinomycosis, sporotrichosis, etc., a strong solution of iodine,

Iodine, 1 grm.  
Iodide of potassium, 2 grm.  
Water, 100 grm.

acts almost as a specific.

As a caustic, tincture of iodine is commonly employed in injections for hygroma and hydrocele, but Schiassi, of Bologna, injected successfully several times, the above strong solution into the saphena vein for varicose veins.

In gynaecology, tincture of iodine finds many uses. A plug of cotton, steeped in a mixture of glycerine and iodine (1-10; -20-30) is frequently employed in infections of the uterus and the pelvis. For puerperal infection, iodine is freely used, especially in Italy, where the method is known under the name of Mergari.

For the last three years certain surgeons employ iodine exclusively as an antiseptic, in major operations. The hands are rinsed with solution No. 2; the skin over the region is painted with tincture of iodine; iodide catgut is used for ligatures and sutures; a suppurating cavity discovered in the course of the operation is sponged out with No. 2 solution; the line of suture of the peritoneum is painted with No. 1 solution, and that of the skin with tincture of iodine on the third day after the operation, and again when the sutures are being withdrawn. By this means an ideal linear cicatrix is obtained.

#### CANCER OF THE CERVIX.

At the recent Congrès de Chirurgie, M. Jayle communicated a series of 120 cases of cancer of the cervix. He distinguished four degrees or stages in the evolution of the disease. In the first, the cancer is very limited and ablation easy; it is also easy in the second degree, where the cervix is more or less invaded; in the third degree, where the large ligaments begin to be infiltrated, the neoplasm may be removed, yet without injury to the neighbouring organs. In the fourth and last stage an operation is hardly advisable.

The influence of the menopause on cancer of the cervix is certain, but not preponderant. Virginity preserves from the disease, but women who have never been pregnant are as much exposed as the others. Heredity is frequent. Fibroma and cancer have no common causal relation. Women, predisposed by heredity or weakened by general or local maladies are particularly predisposed to cancer of the cervix.

If the *début* is always insidious, the period of latency does not exceed a few months. The warning symptom, in three-fourths of the cases, is hæmorrhage, more or less abundant, appearing between the regular periods or after coitus. In other cases, sanguinolent or yellowish discharge is the symptom that should attract attention.

Patients generally retard coming for examination, either from negligence or that they believe the unusual symptoms due to the approaching menopause, or, again, they are reluctant to undergo examination.

In every case, said M. Jayle, where a woman complains of "losses," pains down the thighs, in the back, the abdomen, stomach, or intestines, an examination should be made.

#### GERMANY.

Berlin, Dec. 5th, 1909.

#### THE SIGNIFICANCE OF THE RED BLOOD CORPUSCLES FOR DISEASES OF URINARY ORGANS, AS WELL AS FOR THE HUMAN BODY GENERALLY

AT the Medizinische Gesellschaft, Hr. Otto Loose spoke on this subject. He said that in his histological studies into recovery from diseases of the urinary organs, he had met with conditions that were not in agreement with our present views in regard to blood cells. In all cases of recovery, on looking into the dark field, nuclei were seen to develop in the blood discs, and these, according to the cause of the different nucleus formations, formed the commencement of a further development of red blood corpuscles. Out of such red blood corpuscles that had become nucleated there then developed multinucleated white blood corpuscles as well as the cells that had been designated as lymphocytes and myelocytes, etc. The further development was dependent on the cause of the disease as the releasing factor, as well as on chemical and physical influences.

Moreover, the speaker had found cells in many other organs and tissues, the development of which out of red blood discs he believed he could prove, and especially the development of spermatozoa and their initial stages could be traced back to them. In a large measure also they participated in the formation of tumours.

He saw in these discoveries the answer to the question as to the mode of action of natural and artificial hyperæmias, and in this way he had found a pathway for the study of the action of medicines on morbid processes. The address was illustrated by a large number of drawings projected on to the screen.

Hr. Skaller followed with a paper on the

ORIGINATION AND TREATMENT OF EXCESSIVE SECRETION OF GASTRIC JUICE IN HEAVY SMOKERS.

He said that the mischief caused by steady smoking might be either direct or indirect. As an illustration he mentioned the eye. Injury to the conjunctiva from tobacco smoke was direct, injuries to the optic nerve were indirect. These followed from the reception of the poisonous constituents of tobacco into the blood current, and were a part of the general intoxication. The most constant functional disturbance was excessive secretion of gastric juice, and his aim had been to prove the connection between the phenomenon and excessive use of tobacco. For this purpose the smoke of a cigar was passed through 20 ccm. of water, and this was injected into a dog. It was shown that the secretory mechanism of the dog was extraordinarily sensitive as regarded the smoke from cigars or cigarettes. This tobacco water caused hypersecretion of gastric juice in the dog, and he claimed that it did so also in the human subject. (If the dog had been habituated to the use of tobacco for a few years, the result might have been different.—CORR.)—The hypersecretion of heavy smokers was not, therefore, of reflex origin, or, at least, reflex only, but a part of a general intoxication. Exemplified on the eye, it was not the direct injury to the conjunctiva, but the indirect injury to the optic nerve. If smokers suffered from gastritis, it was not due to the hypersecretion, but in spite of it. On making inquiry into which of the constituents of tobacco smoke it was that caused the mischief, it was found that there was none when tobacco free from nicotine was used, whilst the injection of nicotine itself set up a train of symptoms nearly identical with those caused by the tobacco smoke water. It was the nicotine constituent, therefore, that did the harm. The other constituents of tobacco smoke—sulphuretted hydrogen, sulphuric acid, carbon monoxide, and pyridin—were irrelevant as regarded the stomach. The contained coal tar oils might set up a pure gastritis, but they were not poisons.

Further inquiry was made as to whether the poison acted on the innervation of nerves or on the parenchyma of the glands. As the effect was not produced in animals that had been atropinised, and as, after injection of Liebig's meat extract, it appeared in spite of atropinisation, he believed that the hypersecretion was due to disturbance of innervation. Considering, also, that the action took in dogs with ("nervelosen") small stomachs, he believed that the ganglia that were seated in the walls of the stomach were the first to be affected by the nicotine irritation.

As regarded treatment, in the worst cases abstinence from smoking was desirable. In milder cases it would be sufficient to abstain one or two days a week, to enable the blood in the circulation and in the liver an opportunity of getting freed from the poison. He pointed out the known harmfulness of cigar stumps, in which there was an accumulation of nicotine, which for this reason it was harmful to keep in the mouth too long or to continue chewing the stump after the cigar had gone out.

So-called "moist" smoking also favoured the entrance of nicotine into the circulation. On the other hand, a cigar after a full meal was all right, as increase of the gastric secretion was then desirable.

Dr. Julius Citron followed with some observations on

TUBERCULIN TREATMENT.

He said that two tuberculins were to be distinguished, the Old Tuberculin and the New (bacillus emulsion). Tuberculins were not toxins, nor endotoxins, but an approach to the aggressins of the tubercle bacillus. He distinguished three reactions, that at the site of the puncture, that at the seat of the disease, and the fever. The curative effect depended partly on the disease reaction. Old tuberculin had the stronger action on the diseased parts, and the speaker recommended the use of it. As the injection set up infiltrations readily, they used a modified preparation at the Charité that was borne almost without any reaction at all. He started with the smallest doses, and gradually went on to larger, but never to large doses. It was best to inject at intervals of five,

six, and more days, as then the formation of protective material was attained. Only high fever was a contra-indication of injection; pulmonary hæmorrhage was not. The early stage of tuberculosis offered the best chance of recovery; pronounced tuberculosis a moderate chance; with cavities the chances were poor. The treatment must be continued as long as there were any symptoms, and the commencement must be made in an institution. There was no biological criterion for the success of tuberculin treatment; we could only fall back on the clinical symptoms.

AUSTRIA.

Vienna, Dec. 5 h, 1909.

EPIDEMIC POLIOMYELITIS.

At the Amts Aerzte Congress, Fürntratt read an exhaustive paper on the infectious nature of poliomyelitis, first described by Prof. O. Medin, of Stockholm, in 1878, and reported to the Berlin Congress in 1890. At this meeting he related 44 cases that had come under his personal notice in the summer of 1878 in the town of Stockholm alone. He affirmed that the onset and course of the disease were variable, but the majority of the symptoms were of a spinal nature, although he was convinced the cerebrum was involved as well as the peripheral nerves. Prior to this description, Jacob von Heine, of Kannstatt had met with a number of cases in 1860, which he defined as a spinal disease in childhood, and the sections obtained at the time clearly proved to be poliomyelitis acuta anterior.

Since then reports of epidemics of the disease have come from the south of France, America, and Norway, but the favourite home of the disease seems to be the Scandinavian "Halbinsel."

In the Swedish epidemic Wickham records 1,000 cases which he traced as having originated from one individual case that led him to the conclusion that the disease was infectious.

In Austria the disease seems to have been first observed in 1898 in an aggravated form and in large numbers, this also pointed to a contagious nature.

Since 1904 Vienna has been visited more or less every summer and autumn by the disease, this gives the appearance of a seasonal incidence, although in Steyr, a small town in Upper Austria, an epidemic occurred in the months of October in 1908 and 1909, where 50 cases occurred, with 12 deaths.

In Styria an outbreak occurred last year, commencing in the month of July, spreading over the whole of the Principality; by the end of October 310 children had been affected, 54 of whom were in the town of Gratz. Closer observation confines the greatest number to August and September, the numbers sinking rapidly in October, and disappearing entirely during the winter months. We must admit that the epidemic in the little town of Steyr was the exception to this rule, as October showed the greatest number.

Since Mekman's time little has been added to the symptomatology of the disease. After an initial prodroma of fever resembling influenza, with general malaise, pain in the limbs, neck, and back; sometimes angina, other times diarrhoea, with intense headache and stiff neck the disease is ushered in when the patient has reached the juvenile age. The pains are so severe in the latter that morphia injections are necessary to give relief. The paralysis that follows is usually confined to the neck and hips, preventing the patient from sitting upright. There are other cases with severe neuritis, facial paralysis, and not infrequently paralysis of the cerebral nerves, which is usually associated with the meningeal form. Another complication accompanying these disturbances is the temporary retention of the urine; also a form of herpes zoster over the paralysed extensor muscles.

The mortality is variable, but the most reliable statistics to hand are those given in the Styrian cases. Of the 310 attacked 39 died, or a percentage of 12.5; six of these deaths occurred under 6 years of age, twenty-two between 6 years and 14 years, and ten over that age. Death usually occurs from the paralysis rapidly invading the respiratory apparatus or centres of respiration. The lecturer had often seen the paralysis

invade the various organs slowly, thus resembling Landry's paralysis. Death is often rapid, occurring on the first or fourth day of the illness. We may correctly term it a child's disease, occurring most frequently between 5 and 15, after which it gradually disappears.

Fürntratt agrees with Wickman in the manner of attack and the infectious nature of the disease. He has seen several sisters attacked, also neighbouring children that had visited others attacked. In one case he saw two children who had lain in a bed from which a poliomyelitic case had been taken, and both were afterwards afflicted with the disease. On the other hand, no case has been met with where the disease has radiated from a centre, nor can it be attributed to school contacts; on the contrary, the disease gradually disappeared in Gratz when the school resumed after the holidays. Another strange coincidence in the Gratz outbreak was that none of the small industrial towns around Gratz had a single case to record. Again, 15 of the cases admitted into hospital were taken from families where no others were affected, although no disinfection or isolation of the other members had been practised. In the largest families never more than two were affected, and these were frequently females. In all these cases no contacts could be clearly established, nor could the origin be satisfactorily traced to a preceding infection; in this we entirely differ from Wickman in the Swedish epidemics. Although we were unable to follow up a chain of contacts, we were persuaded that an appearance of infection did exist, but we must confess these were the exceptions. As a rule, the disease invades a wide area, probably attacking the more susceptible individuals, these may be few in some neighbourhoods and plentiful in others, the infection passing in this way from one person to another. Be this as it may, the infectious virus is still unknown and its transmission a mystery. Until the bacteriologist lifts the veil, poliomyelitis will remain a puzzle, but data such as have been obtained in Styria last year will go far to aid in the solution of this difficult problem.

### FROM OUR SPECIAL CORRESPONDENTS AT HOME.

#### — EDINBURGH.

**CREMATION SOCIETY IN EDINBURGH.**—Dr. Aitchison Robertson addressed a meeting in Edinburgh on December 3rd, in furtherance of the progress of cremation. He advocated cremation from an economic, sentimental, and hygienic point of view, and after pointing to the dangers of an aggregation of bodies in graveyards, dealt with the objection that cremation destroyed evidence of crime, by showing that the method of death certification prior to cremation was so carefully guarded as to render it almost impossible that a crime could pass undetected. The practice of cremation had grown slowly in England, but the numbers of cremations had doubled in the last ten years, and altogether, up to the end of 1908, the number had been 7,264. This fell far short of Germany, where cremation was on the increase, there having been 2,977 cremations in 1907, and 4,050 in 1908. It was stated, also, that the cost of a handsome urn in a permanent niche was very much less than the simplest form of earth burial. On the motion of Dr. Burn Murdoch, supported by Dr. Robertson, Medical Officer of Health for Leith, it was agreed "That an Edinburgh Cremation Society be formed to promote the practice of cremation and burial reform, and that the Committee already appointed take the necessary steps to complete the formation of the Society, and call a meeting at which a constitution will be adopted and office-bearers appointed."

#### GLASGOW.

**DIAGNOSIS OF INFECTIOUS DISEASES.**—Dr. Chalmers, Medical Officer of Health for Glasgow, in his report to the Health Committee of the Corporation, reminded medical men of the difficulty of diagnosing ill-defined cases of typhus fever. Dr. Chalmers referred to the

occurrence of several ill-defined cases of typhus fever, which had occurred in the Garscube Road district of the city. In Bridgeton a similar group of cases had occurred in the interval, and in this district the earlier cases appeared to have been less defined than some of those which had escaped notice in connection with the Garscube Road cases. From notification of one of the present group of cases it was ascertained that certain illnesses of an unknown character were occurring in a friend's house in the same street. On visiting the latter family four persons—the mother and three children—were found to be ill, and it was also ascertained that a married daughter had been removed to the Eastern District Hospital two days before, where she had been admitted as suffering from pneumonia, but the Medical Officer's department found to be under treatment as probably suffering from typhoid fever. All five persons were placed in the Fever Hospital under observation, and the first patient's illness became definitely typhus fever, and the others were obviously of the same character, although less well marked. Another case arose from a visitor to the house of the first patient, who (the visitor) on his (the patient's) admission to hospital was removed to the Reception House for observation. While all of these cases were, in a sense, inter-related, all of them, except the last case, should be regarded as having a common origin, which had not been definitely discovered, although it had to be noted that another member of the family had been admitted to hospital and certified as diphtheritic, but who presented symptoms of an anomalous character, and which were not inconsistent with ill-marked typhus fever. Dr. Chalmers states that the obvious difficulty which exists, even in hospital, in recognising such cases, may serve as an additional reminder to practitioners that typhus fever is present in a considerably modified form both in the Northern and Eastern Districts of the city.

#### DRASTIC ACTION BY THE EASTERN MEDICAL SOCIETY.

—At a meeting of the Society dealing with the recent part time school appointments of the Glasgow School Board, Dr. Millar Semple gave a *résumé* of the situation, including the resolution of the meeting of the general practitioners held in the Faculty Hall, when a motion was passed, with only one dissentient, that the salary offered was inadequate, and that the practitioner should not apply for such posts. In spite of this motion, Dr. Millar Semple stated that certain members of the Eastern Medical Society had applied for and obtained these school appointments, and still held them. These medical practitioners were called upon to offer an explanation as to why they had accepted the posts. After a short discussion, a resolution was moved that those members of the Society who had accepted these appointments should be called upon to send in their resignations to the School Board, or that they should no longer be admitted to the benefits of the Society, and this motion was carried by a majority of over 20. An amendment was proposed that the Society should censure its members who had accepted the appointments, but this was defeated.

#### SUGGESTED AMALGAMATION OF GLASGOW INFIRMARIES.

—At the annual statutory meeting of the Victoria Infirmary on December 2nd, the Chairman threw out the suggestion that some scheme of joint management of the Royal, Western, and Victoria Infirmaries might be practicable. All three institutions rendered the same kind of service, dealt with the same problems, had the same system of management and equipment, and from the standpoint of economy he thought amalgamation would be an improvement. Their incomes were not increasing as he would like, and benefactors were often brought face to face with the invidious duty of allocating their gifts among the three institutions. He suggested that all subscriptions should be pooled, and a general Board appointed with supreme control. The special supervision of each hospital would be delegated to a sub-committee.

**NOTIFICATION OF TUBERCULOSIS IN GLASGOW.**—At a meeting of the Glasgow Town Council, on December 2nd, it was resolved, with only one dissentient, to apply the Infectious Disease (Notification) Act to tuberculosis of the lung for a period of three years. Notification is estimated to cost £1,400 per annum.

## LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

### THE GENERAL MEDICAL COUNCIL AND QUACKERY.

*To the Editor of THE MEDICAL PRESS AND CIRCULAR.*

SIR,—Dr. Latimer in his excellent speech at the St. James's Vestry Hall on November 22nd clearly explained that the General Medical Council possessed no statutory powers enabling it to interfere with unqualified practitioners, or with the purveyors of fraudulent quack medicines and apparatus; but he omitted to mention that the Council was in no way debarred from using its influence in promotion of new legislation to deal with these evils, and that until pressure was brought to bear the Council had consistently ignored the whole question. The Council of the British Medical Association, itself excited to action by the stimulus of its Divisions, addressed the Medical Council; the Medical Council, thus roused, approached the Privy Council, which, in its turn, has set on foot an inquiry through Medical Officers of Health into the extent and effects of unqualified practice. The General Medical Council and the Privy Council both left out the quack medicine traffic, this not having at first been included by the British Medical Association. The Council of the Association is, however, now convinced that any legislation against quackery which did not include the traffic in quack medicines and apparatus, must, as I have always insisted, prove largely futile, since a vast amount of illegal practice is carried on under the cloak of this trade. The questions in the House of Commons by Captain Craig, referred to by Dr. Latimer, which elicited the important statement by the Home Secretary at a Select Committee on quack medicines should be appointed next Session, were prompted neither by the General Medical Council nor the British Medical Association. The episode served to show that the facts need only laying before the Legislature in incontrovertible form to compel attention; it suggested that if the Medical Council, supported as it is by the British Medical Association, would exert itself, it could at least obtain the appointment of a Royal Commission to inquire into the entire question. The evidence for medical law reform is overwhelming, but largely owing to the fact that the majority of newspapers are suborned by quackery, the case can be publicly stated only by means of a Royal Commission. The exposure, as I have so often repeated, would prove beyond doubt that reform would confer upon the public advantages far outweighing professional interests, and that improvement of the status of the legitimate practitioner would be as much to the advantage of the people as to that of the profession. It is within the power of Dr. Latimer to urge these considerations upon the Medical Council, and it is to be hoped he may feel disposed to do so.

I am, Sir, yours truly,

HENRY SEWILL.

The Old Rosery, Redhill, Surrey,  
November 29th, 1909.

### THE JUBILEE OF THE DENTAL CHARTER.

*To the Editor of THE MEDICAL PRESS AND CIRCULAR.*

SIR,—The Dental Surgeons have shown themselves desirous of commemorating the Jubilee of their Charter, and the Royal College of Surgeons of England, as the first examining body to grant degrees in dental surgery, has endeavoured to show its interest in this branch of the profession, first, by accepting the trust of the Odontological Museum, which is now accommodated in a room adjacent to the Hunterian Collection, and secondly, by entertaining the leading members of the profession at a dinner within the precincts of the College.

I would venture to suggest that this movement might well be directed towards a more permanent memorial of the Jubilee of the Dental Charter by establishing a

"Research Scholarship" and demonstratorship in connection with the Dental Museum.

There are already two small endowed prizes, the Tomes and Cartwright prizes, administered by the College, the one awarded every third, and the other every fifth year; but the dental profession is deserving of something of a much wider scope than these for the stimulation of research, and for the higher teaching of its scientific branches.

My own view favours a far more ambitious scheme than anything in the form of a mere prize, whether awarded after examination or conferred in recognition of original work completed. I would ask for the modest sum of £10,000 to endow a research and teaching demonstratorship in connection with the Dental Museum. In this way not only would a scientific worker be secured, but he would by his demonstrations attract the students from the various dental hospitals to study in the Dental Museum. Such a sum could, I am sure, be easily collected from among the dental surgeons alone; but if they were to impress upon their patients the necessity of endowing dental research, there need be no hesitation in raising the sum I have suggested to £50,000, whereby not only research and teaching demonstratorships might be established, but travelling scholarships might be founded, which would be of great advantage in keeping English dentistry in touch with that of foreign countries.

It is some twenty-five years ago since I first began to advocate the bringing of the dental surgeons back within the pale of the profession, and giving them the same opportunities as ophthalmic, aural and other specialists—one could scarcely have anticipated so encouraging a development as has occurred within so short a period. The dental surgeons have not been slow of late to seize the occasions for better recognition; and by placing the Odontological Society under the ægis of the Royal Society of Medicine, and by handing over their superb museum to the care of the Royal College of Surgeons, they have shown their desire to be associated with the general body of the medical profession.

Now I think the time has come for the further development of the scientific side of the Branch in which direction several members have already gained great eminence.

Should my suggestion find favour with the dental section of our profession, I should be pleased to co-operate with any interested in this project; but it must be distinctly understood that I write quite unofficially, though I have little doubt that the Council of the Royal College of Surgeons would give its consent to the administration of such a research demonstratorship as that proposed if the money were forthcoming for its endowment.

I am, Sir, yours faithfully,

R. CLEMENT LUCAS.

London, W., November 30th, 1909.

### PROFESSOR JONNESCO'S METHOD OF INDUCING SPINAL ANALGESIA.

*To the Editor of THE MEDICAL PRESS AND CIRCULAR.*

SIR,—Although by this method (addition of strychnine), which has been lately demonstrated in London, the effect of the analgesic drug upon the respiratory and other vital centres may be counteracted (and spinal analgesia thus rendered practicable in regions where it has hitherto been considered impossible), I cannot but think that as regards punctures above the lumbar region there are risks which do not seem to have been very seriously considered. The author of the method indeed has mentioned the possibility of "pricking" the spinal cord, but this he considers to be of no consequence. How can one ensure, however, that something more than a "prick" of the cord or of its vessels, or injection of fluid into its substance, may not be caused by an "untimely movement of the patient," or unsteadiness of the operator, or by some anatomical or pathological peculiarity interfering with the indications that the required depth has been reached? Also, an error in the preparation of the fluid might entail serious

results in high dorsal puncture—far more so than in the lumbar region. Again, it would be of little use for the respiratory centre to remain active if the muscles of respiration become paralysed—and it must be remembered that a “stillness” and laxity of muscles is commonly brought about by spinal injection as well as a loss of sensibility. In fact, this is one of its advantages in such an operation as suprapubic prostatectomy, for which I have several times performed it. The possibility, however, of artificial respiration becoming necessary with a conscious patient is not pleasant to contemplate.

Professor Jonnesco's reference to the advantage of dispensing with the anæsthetist, “a person often inexperienced, and never responsible,” supplies some clue to the greater favour with which spinal and local anæsthesia is regarded on the Continent, as compared with this country. One can hardly imagine a surgeon holding in London or any large city in this kingdom, a position comparable to that of Professor Jonnesco in Bucharest so describing the anæsthetists with whom he is accustomed to work. As I am informed, in most Continental hospitals mechanical and moral restraints need to be employed as adjuncts to imperfect anæsthesia to a much greater extent than would be tolerated either by our own operators or by our own patients.

I am, Sir, yours truly,  
J. D. MORTIMER, M.B., F.R.C.S.,  
Anæsthetist, Royal Waterloo Hospital,  
St. Peter's Hospital, etc.

December 4th, 1909.

#### ANTI-VIVISECTION IN LANCASHIRE.

To the Editor of THE MEDICAL PRESS AND CIRCULAR

SIR,—The enclosed reports from the *Manchester Courier* and the *Liverpool Echo* exemplify the activity of anti-vivisectionist fanaticism in this county. The meeting in this city was, as you will see, presided over by Dr. G. H. Pinder, whilst the principal speaker was that well-known physiologist (!), Dr. Abi Naar Wall. The latter gentleman is too modest to refer to, much less describe, his own research work, which enables him categorically to deny the value of physiological experiment, and positively to denounce the wanton cruelty of those who pursue it. He takes care to keep clear of a charge of libel by speaking of a class, not of individuals, and there is no means of putting an end to these mischievous propaganda. It seems a pity that the Research Defence Society cannot follow these men about with lecturers on the other side. The effect of the teaching is to imbue the simple and ignorant with a distrust of medical science, and to drive them into the hands of the quacks, including the cancer cures, who “eradicate the disease without the aid of the cruel surgeon's knife”—and other such cruel and cynical rascals.

I am, Sir, yours truly,  
A MANCHESTER SUBSCRIBER.  
Manchester, December 3rd, 1909.

#### OBITUARY.

CHARLES ROBERT BELL KEETLEY, F.R.C.S.  
ENG., L.R.C.P.LOND.

WE much regret to report the sudden death of Mr. C. Bell Keetley, the well-known surgeon, on the 4th inst., at the age of 61 years. Mr. Keetley was born at Grimsby, his father being a shipbuilder, and educated at Browne's School, Grimsby, and St. Bartholomew's Hospital. One of his chief achievements as a student was the taking of the gold medal in anatomy of the University of London. His chief appointment was that of surgeon, since the year 1878, to the West London Hospital, and at the time of his death he had for several years held the senior post. He was also a former President of the West London Medico-Chirurgical Society, with which body he was for many years closely connected. A kindly and genial man in private life, he commanded a wide circle of friends and acquaintances. In spite of an unfortunate

defect in hearing, he contrived to enter fully into, and to discharge, all the duties of a busy social and professional life. He was an old friend of, and a frequent contributor to, THE MEDICAL PRESS AND CIRCULAR. His contributions to surgical literature were numerous and valuable. His “Index of Surgery” reached a fourth edition, and one of his most recent articles on “Appendicostomy” attracted an unusual amount of attention.

ROBERT MARCUS GUNN, M.D., M.B.ED.,  
F.R.C.S.ENG.

WE regret to announce the death of Mr. Marcus Gunn, the well-known ophthalmic surgeon. He was educated medically at Edinburgh, London, and Vienna. During a brilliant professional life he filled many parts and gained many honours. He was Senior Surgeon at the Moorfields Hospital, Consulting Surgeon at the National Hospital for Paralysis and Epilepsy, and Surgeon to the Westminster Ophthalmic Hospital. He was late Arris and Gale Lecturer at the Royal College of Surgeons of England; Bowman Lecturer, Ophthalmological Society, 1900; President, Ophthalmological Society; Ophthalmic Surgeon to the Great Northern Central Hospital, and the Hospital for Children, Great Ormond Street. He made many valuable contributions to ophthalmic literature, among those best known may be mentioned the article, “Diseases of the Eye,” in “Treves' System of Surgery,” and “Retina,” in the “Encyclopædia Medica.” He was co-editor of “Gowers' Medical Ophthalmoscopy,” 3rd edition, etc., etc. A man of wide culture and charming personality, his death will be regretted by many friends.

#### REVIEWS OF BOOKS.

##### SEVEREST ANÆMIAS. (a)

IT is in some respects regrettable that Dr. Hunter has chosen to issue his latest work on anæmia in successive volumes. It would, we think, have enabled readers to form a better estimate of his views had he given them to us at once in their entirety. The present volume deals with the evolution of our knowledge of the type of anæmia described by Addison, and commonly known as “pernicious anæmia,” a name which Dr. Hunter discards as having acquired a connotation wider than the original conception of Addison. Dr. Hunter's long and valuable study of the hæmolytic nature of the disease is too well known to require more than mention. The volume before us does not contain so much in the way of original data (for these we are referred to his previous book), as a lengthy argument intended to clear up the confusion which he finds has been introduced into the conception of pernicious anæmia by the hæmatological school of workers. The reasoning is not always easy to follow, nor do the charts intended to help the reader materially simplify matters. As we understand it, the position of matters is somewhat the following:—Dr. Hunter, and with him most English physicians at least, regard the disease described by Addison as a definite entity. The hæmatological school assert that the characteristic feature of an anæmia they identify with this Addison's anæmia is a megaloblastic degeneration of the marrow. Dr. Hunter believes that the central characteristic is hæmolysis due to a specific (drain) infection entering through the lesions of a peculiar glossitis; the marrow chain being secondary. By their criterion, the hæmatologists admit certain anæmias which Dr. Hunter rejects, and *vice versa*. On the other hand, notwithstanding Dr. Hunter's observations, many competent observers have failed to confirm the invariable occurrence of glossitis in cases which they identify with Addison's malady, though some of them are ready to go along with Dr. Hunter so far as the question of hæmolysis is concerned. Presumably, some of these cases fall into Dr. Hunter's group of septic anæmias, which fall to be considered in the forthcoming volume.

(a) “Severest Anæmias.” By William Hunter, M.D., Vol. 1. London: Macmillan and Co., Ltd. 1909.



The argument in the present book is complete in itself, but we doubt whether it is possible to come to any conclusion except a merely dialectical one, until we have Dr. Hunter's views on the other "Severest Anæmias" before us. As matters stand, while Dr. Hunter makes out a strong case for the hæmolytic origin of the disease, he cannot be said absolutely to prove his contention regarding specific glossitis. Apart from this special question, the volume is a valuable contribution to the history of a complicated topic. It proves once and finally that the recognition of "essential anæmia" was due to the clinical acumen of Addison, a fact which has been obscured by our German colleagues' weakness for an uncritical "casuistik," and their comparative ignorance of English medical literature.

#### SIGHT TESTING MADE EASY. (a)

THE author, in this small work of 66 pages, deals with the elementary facts of sight testing. The work is obviously elementary—elementary to the extent of being incomplete—in as much as no details are given of retinoscopy. When the "busy practitioner"—the adjective seems almost an anachronism in these days—believes that he has the time and the inclination to add sight testing to the other demands upon his services—it must surely be worth his while, not only in his own interests but in those of his patients, to learn the subject as it is usually taught. The author divides his chapters into two parts (1) Refraction and ophthalmology; (2) sight testing; and in this small compass provides for the "busy practitioner" a well-written introduction to the various forms of ametropia, and the use of lenses for their correction. As such, and as far as it goes, the book, doubtless, will be found useful by those for whom it has been more especially compiled.

## MEDICAL NEWS IN BRIEF

### A Lady Doctor's Action for Alleged Libel.

THE plaintiff, Dr. Martha Adams, sued the defendants, before Mr. Justice Grantham and a special jury in London, to recover damages for an alleged libel concerning her published in an article in *Vanity Fair*. The writer of the article in question, the Hon. Ernest Pomeroy, was the only defendant now proceeded against, the action having been stayed as regards the others.

The defendant pleaded that the words used were not defamatory, and further said that so far as they consisted of statements of fact they were true, and so far as they consisted of expressions of opinion they were fair comments on a matter of public interest.

Dr. Macdonough, examined by Mr. McCall, said he was the district medical officer for vaccination at Twickenham. He had seen a copy of *Vanity Fair* containing the alleged libel. There was no truth in the suggestion that the plaintiff arranged with him to share his vaccination fees with her. It would be a most improper thing to do.

Cross-examined by Mr. Rawlinson.—Vaccination officers sometimes received 5s. a case for vaccinations. Between 1867 and 1898 vaccination was compulsory. From 1898-1907 exemption might be obtained by going before a magistrate in open Court and stating a conscientious objection. Now such exemption might be secured without appearing in open Court.

#### CASE FOR THE DEFENDANT.

The Hon. Ernest Arthur George Pomeroy, examined by Mr. Bartley, said that for many years he had taken an interest in the question of vaccination and anti-vaccination and had written articles from the latter point of view. He had also assisted persons to get exemption from vaccination when possible. Before he saw the article in the *Morning Leader* he had never heard of the plaintiff. On reading the article he wrote

(a) "Sight Testing made Easy." By W. Wright Hardwicke, M.D. St. And., M.R.C.P. Edin. London: J. and A. Churchill. 1909.

to Mr. Hazard, the father of the child referred to, in order to find out whether the facts had been accurately stated. As a result of his experience it was impossible in many districts to get exemption from vaccination under the Act of 1898. He had no personal feeling against Miss Adams when he wrote the article. He was writing against the general danger of vaccination and the danger of enforcing it compulsorily. He wrote in the interests of the poorer class of people and in those of anti-vaccination. He himself held a strong view that vaccination was dangerous. This was based on the minority report of the Vaccination Commission and other sources.

Mr. McCall.—Do you mean that the doctors believe in vaccination because they want to get fees?—Well, poor fellows, they have got to live.

Re-examined.—In writing the article he had no other motive than discussing a matter of great public interest.

His Lordship summed up the case to the jury, who, after a short deliberation, returned a verdict for the plaintiff with one farthing damages. Judgment was given accordingly.

### Notifying Consumption at Glasgow.

BAILIE J. W. STEWART moved: "That the Corporation, as Local Authority for the City and Royal Burgh of Glasgow under the Infectious Disease (Notification) Act, 1889, Order, in terms of Section 7, Sub-Sections 1 and 2 thereof, that said Act shall, in the district of the said Local Authority, apply to tuberculosis of the lung or tubercular phthisis, and that for a period of three years from the expiration of one week from the date of the advertisement to be made in terms of the said Act (Section 7, Sub-Sections 4 and 5)." The resolution, he said, was simply asking the Corporation to give its formal approval to its former resolution, contained in the Health Committee minutes of 1st September, 1909, and approved by the Corporation, 14th October. The statute required that a certain interval should elapse and that a special meeting should then be held for consideration of the matter. If they approved to-day the next procedure was to transmit the resolution to the Local Government Board.

Bailie Paxton seconded.

Mr. Alexander Kennedy said he wished to move an amendment. It might be that the Council had already committed themselves, but he desired that opportunity of pointing out that this would only be the first step to a more important one. If they took the first step they were bound to carry the matter further, and they should realise what a responsibility they were taking in regard to increased taxation. If they were only going to get the individual labelled, without making any provision for treatment, they were doing a great injustice to the individual. Phthisis was not like the other notifiable diseases. It was not a disease that would last for a week but for the whole life-time of the subject. The only method they had of dealing with it was the open-air treatment, and the Council would be obliged to build sanatoria in order to deal with the sufferers.

The Lord Provost: We are not dealing with that.

Mr. Kennedy: I ask the Council to realise that if you take the first step you are bound to make further provision.

The Lord Provost: No. I cannot allow that to pass.

Mr. Kennedy: I move the previous question.

Mr. Battersby said every point that had been raised by Mr. Kennedy had been before the Health Committee frequently.

Mr. Cohen: What was the cost of this notification?

The Lord Provost: About £1,400.

The resolution was then adopted.

The ordinary meeting was afterwards held.

### University of Liverpool—New Lectureships.

THREE new lectureships were instituted by the Council of the University at their meeting on November 30th, on the recommendation of the Senate and of the Faculty of Medicine:—(1) A lectureship in Orthopædic Surgery, to which Mr. Robert Jones,

Ch.M.Liv., F.R.C.S.Edin., was appointed. (2) A lectureship in Physiology, to which the present Assistant Lecturer and Demonstrator, Dr. H. E. Roaf, was appointed. (3) A lectureship in Pharmacology, to which Owen T. Williams, M.B.London., M.R.C.P., was appointed. The lecturer in Orthopædics will deliver a course of lecture-demonstrations during the summer term, which will be open to graduates and undergraduates alike. The lecturer in Physiology will take special charge of the Chemical Physiology Department. The lecturer in Pharmacology was temporary lecturer in the subject during the last two sessions; he will supervise Pharmacological Research, and will hold a class in Practical Pharmacology, which is in the third year of the curriculum for the degree.

#### Cadbury Brothers v. "The Standard" Newspaper.

THE libel action brought by Messrs. Cadbury, of Bournville, against the proprietors of the *Standard*, was, after a prolonged trial, decided on Monday last in a verdict for the plaintiffs against the newspaper, with the nominal damages of one farthing. Heavy damages were not sought by the plaintiffs, but rather a refutation of the slur on their character implied by an innuendo in the newspaper as to their philanthropic action in endeavouring to stop the importation and ill-treatment of slaves in the production of San Thomé cocoa. The defendants denied that the article published by them was open to the construction put upon it by the plaintiffs, and the verdict went to show that the plaintiffs were justified in their action, and that their reputation was too high to necessitate damages. We congratulate Messrs. Cadbury on the result.

#### Provident Surgical Appliance Society.

THE Thirty-sixth Anniversary Festival Dinner of this useful institution was held at the Prince's Restaurant, on Thursday evening last. The chair was taken by Mr. Sheriff Ralph Slazenger. After the usual loyal toasts, the Chairman proposed the toast of "The Society," whose help literally enables the lame to walk, the deaf to hear, and the blind to see. The toast of "The Corporation of the City of London" was proposed by Mr. E. White, J.P., Vice-Chairman of the L.C.C., and responded to in a humorous speech by Mr. George J. Pack.

A sum of £785 was collected and promised in the room. At the same time, however, the Chairman deprecated the idea that all present should think themselves called upon to subscribe at that moment, but he rather advocated the view that the annual dinner was to further and increase interest in the Society, and for this object a subscription booklet was distributed amongst the company present. The Society is for the help of those who try to help themselves, and is not a pauperising institution.

#### London Hospital.

EXTENSIVE alterations have to be continually made at the London Hospital, as at the other large hospitals, to bring the institution into line with modern requirements. The London Hospital, one of the finest in the world, shows that something like £500,000 has had to be spent by the hospital authorities in this way during the past ten years or so. This, in addition to the very heavy annual expenditure of the hospital, has thrown an extremely heavy strain on its resources.

#### Hospital Sunday Fund.

THE report for the current year adopted at a meeting of the Council of the Metropolitan Hospital Sunday Fund shows the confidence which the public have placed in it for so many years. The collections for 1909 have not been quite so large as last year, but the difference is to be accounted for by the falling off in three or four large offertories only, the total amount collected during the year being £72,650. The fund is well supported by the clergy of all denominations, who this year have been collecting nearly £40,000 for it.

#### Royal Institution.

THE eighty-fourth Christmas Course of Juvenile Lectures, founded at the Royal Institution in 1826 by

Michael Faraday, will be delivered this year by Mr. William Duddell, F.R.S., his subject being "Modern Electricity." The course, which will be experimentally illustrated, commences on Tuesday, December 28th, at 3 o'clock, and will be continued on December 30th, 1909, and January 1st, 4th, 6th, and 8th, 1910.

#### Hospital Saturday Fund.

THE income of the Hospital Saturday Fund for this year amounts to £19,734. This shows an increase of £50 on the amount collected in the corresponding period of last year, notwithstanding the fact that the accounts for 1908 had to be kept open a week later than usual. The accounts for 1909 will be closed on January 10th, 1910, and honorary collectors are requested to send in all moneys collected this year not later than that date.

#### Mind Cures.

A REPORT published in Washington estimates that there are 17,600,000 persons in the United States who, instead of calling in a physician when they are sick, resort to some one of the many forms of drugless healing. Of these systems at least two-thirds are "mind cures." Ten years from now, judging from the rate of increase during the last ten years, says the report, there will be 55,000,000 persons relying on non-medical methods.

#### Professor Politzer Jubilee.

PROFESSOR ADAM POLITZER, of Vienna, will tomorrow celebrate the fiftieth anniversary of his graduation as a doctor of medicine, and the occasion will be made an opportunity for according him special honour. At a festival which has been arranged by the leading Austrian otological societies numerous presentations will be made, among them one from the University of Vienna.

#### Middlesex Hospital.

IN spite of great care in regulating the expenses of the institution, the authorities of the Middlesex Hospital have been compelled to spend £12,500 more than their income during the past year, having had to negotiate a loan with their bankers to meet current expenditure; the total deficit at this hospital is therefore now about £20,000.

#### L.C.C. and Slaughter-houses.

THE London County Council, finding that it had no statutory powers, and having regard to the special circumstances of London and to the numerous interests concerned, has resolved to ask the Local Government Board to appoint a departmental committee to inquire into the questions of the establishment of public slaughter-houses in London and of food inspection generally.

#### Trinity College, Dublin.

THE following candidates passed the Final Medical Examination, Part II., Michaelmas Term, 1909:—

Midwifery.—John H. Woodroffe, Ernest W. G. Young, passed on high marks; John G. Dods, Roclaf A. Albertyn, William R. Watson, Perceval G. Leeman, Euphan M. Maxwell, Francis J. A. Keane, Charles Pentland, Reginald T. Vaughan, John B. Burgess, Victor W. T. McGusty, Richard P. Pollard, James H. Crane.

THE assistant-doctors of the Vienna hospitals have passed resolutions which will lead to a strike unless their claims are acceded to. The Municipal Council has refused to consider their claims, and the doctors have decided to give a month's notice as from December 1st.

These medical men demand the regulation of their position with reference to the directors of the hospitals, the full physicians and surgeons, and the *personnel* of the hospitals, also with regard to accident insurance, liability to the State in cases of complaint on account of professional mistakes, leave of absence, and the raising of their salaries from 133 to 200 kronen per month.

## NOTICES TO CORRESPONDENTS, &c.

**✉** CORRESPONDENTS requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

### SUBSCRIPTIONS.

SUBSCRIPTIONS may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s.; post free at home or abroad. Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially-appointed agents. Indian subscriptions are Rs 15.12. Messrs. Dawson and Sons are our special agents for Canada.

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FOR ONE INSERTION:—Whole Page, 25; Half Page, 23 10s.; Quarter Page, 21 5s.; One-eighth, 12s. 6d.

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ORIGINAL ARTICLES OR LETTERS intended for publication should be written on one side of the paper only and must be authenticated with the name and address of the writer, not necessarily for publication but as evidence of identity.

THE EVOLUTION OF SURGERY.—Pasteur's basic discoveries were practically applied first by Lister, who thus started the evolution of latter-day surgery. Ferrier, and other physiologists, experimenting on the brains of monkeys antiseptically, demonstrated fortuitously the practicability of human brain surgery, which is now universally practised.

W. R. MILLER (Liverpool). You may take it as a rule without exception, that anyone advertising himself as a "Dr." or as "Professor" to cure all ailments is a quack. The Oxford Street "Dr." about whose *bona fides* you inquire, is one of the worst type, and you may congratulate yourself on not falling into his clutches, before asking an opinion. We do not give advice by post, but your complaint is one of quite a common occurrence which can readily be remedied by any general practitioner in your locality.

### THE OATHS BILL OF 1900.

THE new Oaths Bill having received Royal Assent last week, it will henceforth be unnecessary to go through the unpleasant and insanitary duty of kissing the begrimed cover of Holy Writ. For years past we, in these columns, and the medical profession in general, have protested against its observance. It affords us great pleasure, therefore, to announce that the Scottish form of taking the oath, with uplifted hand, will be administered as a matter of course.

ONE INTERESTED.—Reliable statistics on the populations of the countries referred to are not to be obtained. The following, however, may be taken as approximately correct:—The United Kingdom, 45,000,000; Japan, 50,000,000; Germany, 65,000,000; the United States of America, 90,000,000. Japan is increasing more rapidly in proportion than the others, Germany being next.

ERRATUM.—In our "Laboratory Notes" last week we referred to the new combination of iodide of potassium with levurine extractive (Coulurioux of Paris) as "iodase"; it should read "iodurase."

## Meetings of the Societies, Lectures, &c.

### WEDNESDAY, DECEMBER 8TH.

ROYAL SOCIETY OF MEDICINE (BALNEOLOGICAL AND CLIMATOLOGICAL SECTION) (20 Hanover Square, W.).—5.30 p.m.: Papers: Dr. Clippington: The Chiltern Hills; Dr. Mahomed: Atmospheric Electricity.

HUNTERIAN SOCIETY London Institution, Finsbury Circus, E.C.).—8.30 p.m.: Mr. E. H. Fenwick: Surgical Aspects of Kidney Disease.

### THURSDAY, DECEMBER 9TH.

ROYAL SOCIETY OF MEDICINE (NEUROLOGICAL SECTION) (20, Hanover Square, W.).—4.30 p.m.: Clinical Meeting. Cases will be shown by Dr. James Taylor and Dr. Wilfred Harris.

ROYAL SOCIETY OF MEDICINE (OBSTETRICAL AND GYNECOLOGICAL SECTION) (20 Hanover Square, W.).—7.45 p.m.: Exhibition of specimens. Short communications by Dr. Philip D. Turner and Dr. A. H. Lewers.

OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM (11 Chandos Street, Cavendish Square, W.).—8 p.m.: Card Specimens by Mr. S. Stephenson, Mr. N. B. Harman, and others. Declaration of the Poll of the Society re Amalgamation. 8.30 p.m.: Mr. R. W. Doyne: (1) Description of a Form of Conjunctivitis; (2) A Note on Family Choroiditis (with patient); (3) A Note on Myopic Degeneration of the Lens (with patient); (4) Note on a Form of Iritis. Mr. M. S. Mayou: Congenital Sarcoma of the Orbit. Mr. A. P. L. Wells and Mr. M. S. Mayou: A Round-celled Sarcoma of the Lacrymal Gland.

HARVEIAN SOCIETY OF LONDON (Stafford Rooms, Titchborne Street, Edgware Road, W.).—8.30 p.m.: Dr. W. H. Dolamore: Pyorrhea Alveolaris. Dr. A. Fleming: The Specific Treatment by Inoculation of Infective Conditions of the Mouth.

MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22 Chenies Street, W.C.).—5.15 p.m.: Prof. W. Thorburn (Manchester): "Some Points in the Surgery of the Biliary Passages."

HOSPITAL FOR SICK CHILDREN (UNIVERSITY OF LONDON) (Great Ormond Street).—4 p.m.: Lecture (Surgical): Mr. Laue: Some Abdominal Conditions.

ST. JOHN'S HOSPITAL FOR DISEASES OF THE SKIN (Leicester Square, W.O.).—6 p.m.: Chesterfield Lecture: Fungous Diseases of the Skin—(1) *Tinea Circinata*; (2) *Tinea Imbricata*; (3) *Tinea Versicolor*; (4) *Erythrasma*; (5) *Actinomycosis*; (6) *Madura Foot*.

### FRIDAY, DECEMBER 10TH.

ROYAL SOCIETY OF MEDICINE (CLINICAL SECTION) (20 Hanover Square, W.).—8.30 p.m.: Cases by Mr. H. J. Paterson, Mr. J. B. Lunn, Dr. Milne, Dr. McMullen, Dr. Herringham, Mr. A. Carless, Mr. W. G. Spencer, Mr. J. D. Malcolm, and Dr. Poynton.

ROYAL COLLEGE OF SURGEONS OF ENGLAND (Lincoln's Inn Fields, W.C.).—5 p.m.: Mr. F. R. Cross: The Brain Structures concerned in Vision and the Visual Field. (Bradshaw Lecture.)

MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22 Chenies Street, W.C.).—5.15 p.m.: Dr. R. F. Bashford: "Some Results of the Comparative Biological and Experimental Study of Cancer."

### MONDAY, DECEMBER 13TH.

MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22 Chenies Street, W.C.).—5.15 p.m.: Dr. Fitzgerald Powell: "Some Diseases of the Larynx, with special reference to Hoarseness and Loss of Voice."

### TUESDAY, DECEMBER 14TH.

MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22 Chenies Street, W.C.).—5.15 p.m.: Dr. Percy Kidd: "Some Points in the Clinical History of Pneumonia."

## Appointments.

BOOTH, N., M.B., Ch.B.Vict., Senior House Surgeon to the Manchester Royal Infirmary.

FRASER, MARK S., M.B., Ch.B., D.P.H., F.R.C.S. Edin., House Surgeon at the Paddington Green Children's Hospital.

McMUTRIE, A. C. B., M.B., Ch.B., D.P.H., F.R.C.S. Edin., House Physician at the Paddington Green Children's Hospital.

NICHOLLS, G. E. E., M.B., Ch.B.Vict., House Physician at the Manchester Royal Infirmary.

PLATT, H., M.B., Ch.B.Vict., Junior House Surgeon at the Manchester Royal Infirmary.

SMALLEY, A. A., M.B., Ch.B.Vict., House Physician at the Manchester Royal Infirmary.

TATTERSALL, N., M.B., Ch.B.Vict., House Physician at the Manchester Royal Infirmary.

## Vacancies.

City of Leeds Infectious Diseases Hospitals and Sanatorium.—Resident Medical Officer. Salary £120 per annum, with board, lodging, and washing. Applications, to the Medical Superintendent, City Hospitals, Searcroft, Leeds.

County Council of Lanark.—Assistant Medical Officer of Health. Salary £170 per annum, with travelling expenses. Applications to the County Clerk, County Offices, Hamilton.

Kent County Asylum, Chatham.—Third Assistant Medical Officer. Salary £145 per annum, with board, quarters, attendance, and washing. Applications to Medical Superintendent, Chatham, near Canterbury.

Lancashire County Asylum, Winwick, Warrington.—Assistant Medical Officer. Salary £150 per annum, together with furnished apartments, board, attendance, and washing. Applications to the Medical Superintendent.

Lister Institute of Preventive Medicine.—Biochemical Department.—Senior Assistant. Salary £350 per annum. Applications to the Secretary, Lister Institute, Chelsea Gardens, London, S.W.

Enfield and Edmonton Joint Hospital Board.—Resident Assistant Medical Officer. Salary £150 per annum, with rooms, rations, and washing. Applications to T. W. Scott, Clerk to the Board, Public Office, Enfield, Middlesex.

Southampton Free Eye Hospital.—House Surgeon. Salary £100 a year, with board and residence. Applications to Major R. W. Heathcote, Secretary.

West Herts Hospital, Hemel Hempstead, Herts.—House Surgeon. Salary £100 per annum, with rooms, board, and washing. Applications to Robt. L. Butterfield, Asst. Secretary at the Hospital.

## Births.

FERGUSON.—On Dec. 5th, at the Hydropathic Establishment, Great Malvern, the wife of Dr. J. Newbery Ferguson, of a son (John Douglas).

## Marriages.

WILSON-BERRY.—On Dec. 4th, at St. Paul's, Barrow-in-Furness, Lorton Alexander Wilson, M.R.C.S., L.R.C.P., eldest son of John Forsythe Wilson, M.D., to Kathleen, eldest daughter of the Rev. W. Berry, M.A., Vicar of St. Paul's, Barrow-in-Furness.

WILSON-WARREN-VERNON.—On Dec. 3rd, in the Cathedral, Bombay, Captain Frederic Ernest Wilson, Indian Medical Service, son of Major Wilson, late Scots Greys, to May, only daughter of Hon. William and Mrs. Warren-Vernon, of London.

## Deaths.

KEETLEY.—On Dec. 4th, suddenly, at Brighton, Charles Robert Bell Keetley, F.R.C.S., Senior Surgeon to the West London Hospital, of 56 Grosvenor Street, London, W., aged 61.

# THE MEDICAL PRESS AND CIRCULAR.

"SALUS POPULI SUPREMA LEX."

VOL. CXXXIX.

WEDNESDAY, DECEMBER 15, 1909.

No. 25.

## NOTES AND COMMENTS.

### The Patience of Science.

OF all the qualities that go to make up the man of science that of inexhaustible patience is one of the most essential. The life work of a Newton, or a Darwin, or a Lister, or, indeed, of all great men of science, has been built upon a foundation of patient observation. Nowadays the road is somewhat smoother, for the principles of many branches of scientific work are better known, and in many cases research is endowed and there are the contingent advantages afforded by collective investigation. Nowhere has the need of the patient spirit been more brilliantly demonstrated than in the rapidly extending conquest of medicine over infective tropical diseases. The great problem now is, how to eradicate sleeping sickness from Uganda, and it is a great pleasure to record a fresh advance in the attack. One great gap in our knowledge was the failure to discover the pupæ of the tsetse fly which spreads the malady. Early in the present month, however, a number of the pupæ were received at the London Zoological Gardens. The natives failed to find the pupæ, although stimulated by an offer of one rupee a piece for them. It was left for Dr. A. G. Bagshawe to run them to earth in a banana plantation near the shore of Albert Edward, where the larvæ had been deposited, for this particular insect is viviparous. This discovery led to various other investigations of the usual patient thoroughness, as the result of which we may hope that the preventive control of sleeping sickness has been brought well into sight.

### Further Plans.

UNFORTUNATELY for the interests of preventive medicine the banana forms the chief food of the natives in that part of the world, so that to destroy the banana plantations that abound near the lake was out of the question. Professor F. A. Minchin, of the Lister Institute of Preventive Medicine, made the happy suggestion that if fowls were introduced they would probably scratch up and devour the pupæ from the banana rootlets. Then it was found by Dr. Bagshawe that the effective range of the flies from the shore of the lake was not more than a mile. This fact he established by amputating one of the six legs of a number of tsetse flies and releasing the flies which were caught again and identified at various distances from the water's edge. The next step was to remove the huts of the natives beyond this mile zone into a fly-free area. The whole story suggests a kind of scientific chess in which the parasite of sleeping sickness is one of the players. Although now and then the time of waiting between the moves may be tedious, there can be no doubt, judging from previous experiences, which

side will be able to cry "checkmate" at the finish. What would the early fathers of medicine have exclaimed at the spectacle of our best scientific medical men packed off to Central Africa to study the habits of a venomous little fly?

### Evolution at Battersea.

THE Brown Dog statue at Battersea erected to the memory of a certain brown dog and of 232 other dogs "done to death" by vivisection in University College Hospital, a year or so ago became famous, not to say notorious. Now it appears to be evolving into a veritable White Elephant, at any rate, the thing has cost recently some hundreds of pounds in order to keep police on guard near the statue lest perchance some one might damage or deface either the dog itself or the inscription which tells the norrabul tale of woe. At the next meeting of the Battersea Borough Council it will be proposed that efforts should be made to give back this creature to the donors, as its cost for men and watchboxes on the one hand and the obstruction caused to the pathway where it is on the other, are matters that were not in the contemplation of the parties when they accepted the statue. The fact of the matter seems to be that Battersea is beginning to see the affair of the little brown dog in its true perspective. To pay £700 for the protection of a sentimental monument that gives gross offence to many sensible persons is to court the ridicule of the neighbouring parishes less open to the presence of ill-balanced anti-vivisectionists. There never can be enduring peace while so offensive an inscription is flaunted in a public place.

### Vivisection: A New Name Wanted.

THE popular meaning which has unfortunately grown around the word "vivisection" is to be deplored from many points of view. Its original sense in reference to experiment on living animals has become altogether swallowed up by the secondary conception of cruelty attached to it by the apostles of anti-vivisection. Its acquired sense no longer expresses with anything like accuracy (if it ever did) the facts of the case inasmuch as cruelty, that is to say, the causing of unnecessary pain, is avoided by anæsthesia, local and general. Where an anæsthetic is not used the vast majority of operations consist of inoculations involving the mere prick of a pin. The word "vivisection" therefore no longer expresses the meaning that scientific men desire to convey, and any philologist will be doing a service to medical science should he suggest a crisp and adequate new term. It might for example, be replaced by some compound signifying section when anæsthetised or asleep say "somno-

section" or "hypnotomy" or any word of sufficient accuracy and euphony. To our mind the whole vast series of inoculation punctures should be separated from cutting experiments and included under the heading of "vaccination."

#### A Knotty Problem.

THE disquieting fact of the steady decline of the national birth-rate is variously interpreted by different observers, but the problem is one of serious import to all thinking men. The statesman and the statistician may well stand aghast at the future prospect of a vast empire whose dwindling population will find it hard to maintain a foremost place among the powers of the world. On the other hand, the stern moralist reckons little of principalities and powers, attaches supreme importance to the decadence of a race that presumes to limit the number of its offspring. Yet when all is said and done the bare fact remains that the decreasing birth-rate prevails amongst the well-to-do, the thoughtful, the provident, and the more intellectual classes of society, while the high birth-rate is maintained amongst the thoughtless, the reckless, the improvident, and the poorer classes. The indictment against limitation, therefore, is levelled at that portion of the community which represents the brighter and better side of humanity. It is not easy to fathom this point. Perhaps the decrease is symptomatic of the unequal distribution of wealth and the greater demands upon the individual who attempts "to live up to his position." In that case the State endowment of parentage may before long be adopted by our progressive legislators. The thin end of the wedge has been already inserted in the income-tax relief in respect of children proposed in the Budget recently rejected by the Lords.

#### The Daily News Declines.

THE fact is, of course, notorious that one of the chief bulwarks of quacks and of quackery lies in the active and passive help afforded by the lay newspaper press. That attitude is explained readily enough by the enormous sums of money spent in advertisement by irregular practitioners and the vendors of secret medicines and cures. To some extent a few of the leading British newspapers have been induced to fly their colours by the British Medical Association, which has been refused advertisement of its reprint "Secret Remedies" by the *Daily Express*, *Daily Chronicle*, *Star*, *Graphic*, and *News of the World*. The latest additions are bracketed as the *Daily News* and the *Christian Herald*. It is humiliating to think that journals which profess a high standard of ethical morality should refuse to give publicity to a book published in the best interests of the health of the community. The *Daily News* is so sensitively careful of its readers' moral welfare that it will not even publish the betting news. We venture to say that infinitely less harm is done to the public by horse racing than by pitiless frauds that are daily and hourly inflicted upon our fellow citizens of all ages, sorts and conditions by the sordid lies and chicanery of quacks and of secret medicine vendors. We doubt if Mr. Cadbury, who we understand is the proprietor of the *Daily News*, has read the book to which his journal denies publicity, and if he realises in what way the money paid for secret remedies advertisement is obtained? As to the religious journals there could be no fiercer satire upon the difference 'twixt precept and practice than that of the exploitation of a religious publication by a cynical quack.

## LEADING ARTICLES.

### MOTOR CAR TRAFFIC IN TOWNS.

WITH the traffic of public roads, by the nature of the case, must always be associated a margin of accidents to life and limb. Unexpected conditions may suddenly supervene on the part of drivers, of pedestrians, or of the physical environment. Under certain circumstances, such as fog, a slippery roadway, and the momentary negligence or carelessness of persons concerned it would be impossible to avert an occasional disaster. But there are many accidents of an avoidable nature, and these it is the duty of the authorities, both local and central, to endeavour to their utmost power to prevent by wise regulations. The problem of the traffic of a great city is complicated at any time, but of late years it has been rendered much more so by the introduction of the disturbing element of motor traffic into the streets. Not only has the pedestrian to acquire the knowledge of the relations of a new and often noiseless vehicle to his own movements, but he is confused by the varying speeds of horse vehicles, and by the swiftness with which motor carriages dash round corners and convert an apparently safe open roadway into a sudden valley of death. The mortality from this cause has reached a pitch that urgently demands attention both from the London County Council and from the Legislature. The matter has been temperately but firmly dealt with by our contemporary, *The Lancet*, in an editorial of December 11th. The suggestion is therein made that if a census were taken of the accident cases now being treated in the London hospitals it would present some suggestive figures. If this were done for a year it seems probable that such a startling mass of evidence would be forthcoming that the authorities would be compelled forthwith to take some sturdy action. There is already in existence a Highways Protection League, formed of citizens anxious to preserve the safety of the public on the highways. Of the various points that have engaged their attention the two important factors of noiselessness and speed must have been amongst the foremost. Most observant persons—and who is not observant of motors?—must have noted the tendency of motor drivers to assume that there is no need to give any warning in streets or squares that are comparatively free of pedestrians, or in such places when nearly deserted at night. That is precisely the time when the hapless pedestrian is lulled for a moment into a fatal sense of security, and when the motor driver seizes the opportunity of making the most of the apparently free road before him. This dangerous set of circumstances would be more or less minimised by the action of an automatic continuous warning, which need not be of an excessively high or loud pitch, by the automatic record of actual speed at the time of an accident (for which a special meter is we believe obtainable), and by the reduction of speed limit to ten miles an hour. These demands can hardly be called unreasonable when on the other hand the safety of the life and limb of the citizen is at stake. As regards the warning by bell or other contrivance there should be some fixed rule as to its use at street turnings and other defined

places, as well as during the exigences of ordinary street traffic. Moreover, it is plainly useless to sound a warning when the motor is within a few feet of the pedestrian, a practice that is not uncommon with drivers, who afterwards in court assert with truth that the warning had been given, but who neglect to add the material qualification that it was given at such time as to be useless. As to the automatic record of speed ascertainable at any particular moment it may be claimed generally that without something of the kind it will never be possible to establish real control over motor vehicles. It often happens that the only witness as to speed is the driver, who is not likely to advance an estimate unfavourable to himself. As to other evidence there are few persons competent to form a correct conclusion as to speed, quite apart from the mere glimpse that is usually afforded during the sudden spectacle of a street accident. But the fundamental fact remains that motor drivers at a high speed are more likely to cause accidents than those at low speed. That ground, at any rate, seems to be unassailable. Were the same maximum rate of speed imposed upon all motor vehicles as that enforced in the royal parks there can be little doubt that the safety of the citizens of all our great centres of population would be greatly increased. Why should any reasonable person want to travel through the streets at a speed greater than ten miles an hour, especially if he knows that to exceed that speed is to endanger the safety of his fellow creatures? The attention of the London County Council is hereby drawn to the foregoing consideration, in the hope that they will once again address themselves earnestly to the diminution of a danger that, day by day, figures more and more urgently upon the town dweller.

#### THE TOWN PLANNING ACT.

THE Town Planning Bill, after many ups and downs, has come into being as an Act in the last few days of the session. It registers several important changes in the law. The Act, as already noted in these columns, protects the county Medical Officer of Health, as he cannot now be dismissed without the consent of the Local Government Board. It also requires every County Council to have a Medical Officer of Health, who must devote his whole time to his duties and must be supplied with all reasonable information by the medical officers of health of the several districts in the county, while in his turn the county medical officer will report to the Local Government Board. Further, each county council must appoint a public health and housing committee, and to this statutory committee all the council's business in respect of public health and housing is to be referred; any local authority, if called upon, must report to the Local Government Board as to the sanitary condition of their area showing any particulars which may be required. The maxim "every man's house is his castle" is wisely, if unpleasantly invaded, by enlarging the power of entry by authorised persons in order to ascertain the condition of the premises. The liability of the landlord for the fitness of the house he lets for human habitation has been increased, where before

he was only liable if the rent was £20 or less in London and so on, he is now liable for houses at a rent not exceeding in London £40; in a borough or urban district of 50,000 or upwards, £26; and elsewhere £16. This liability extends in virtue of Section 15 throughout the tenancy. Another important provision is that closing and demolition orders need no longer go to a court of summary jurisdiction, the local authority makes the order and the appeal is to the Local Government Board. Back-to-back houses and cellar dwellings are prohibited in future. The ultimate possibility of merging district authorities into the county council is to be discerned in the provision for new houses; if a rural district council refuses to provide necessary accommodation for the working classes of their district the Local Government Board after inquiry can order the district council to do the necessary work, or impose it with consent on the county council. Complaint on the above score can be made by four inhabitant householders, and facilities for carrying out the improvements have been made by making land acquirable by the procedure of the Small Holdings Acts, and extending the period money may be lent from 50 to 80 years. Moreover money left by philanthropic persons for housing purposes will in future be under the eye of the Local Government Board, which can cause the Attorney-General to intervene to facilitate legal action. A cottage, as now defined by this Act, can have a garden of an acre in extent. The provisions relating to town planning are an entirely new feature in this country. Hitherto, a new centre of population like the constitution itself has grown and not been made, now the Local Government Board can authorise local authorities to prepare town planning schemes in connection with land likely to be used for building purposes and so avoid hazardous building, while securing on the other hand sanitary conditions, amenity and convenience. In such planning some may get compensation for depreciation of property, others may have to pay should the land be increased in value.

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#### CURRENT TOPICS.

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##### Hop-pickers Typhoid.

THE occurrence of an epidemic of enteric fever at Dudley points the moral as regards the absolute necessity of a rigid system of sanitation in counties as well as in towns. In order to approach a reasonable security against infection the preventive machinery must be comprehensive, co-operative and universal. It avails little to protect a populous city by pure water supply, good drains, and an efficient health administration, if it be liable at any moment to have scarlet and typhoid fever imported by milk from slothful rural farms. At other times the infection having been brought through human agencies, such as small-pox by tramps or, as in the case of Dudley, enteric fever by hop-pickers who have been infected by the impure water of some country stream. The Medical Officer of Health of the last-mentioned town, Dr. Wilkinson, has reported eighteen cases of typhoid within the past five weeks. The whole of the cases occurred in the



Netherton ward, with the single exception of a patient from another part of the town, for whose infection no cause could be traced. Not a single case occurred otherwise in any person who had not been to the hop fields. A number of people had been attacked in the sanitary areas which adjoin Dudley, a fact that emphasises the likelihood of the origin of the whole visitation being due to the agency of water. Both diphtheria and enteric fever have been previously introduced into Dudley by hop-pickers, so that the Local Government Board have every ground for insisting on the future sanitary supervision of the hop farms.

#### The Medical Curriculum.

IN whatever form it appears, a debate on medical education occurs in practically every session of the General Medical Council. A distinction often overlooked in discussions on the subject was pointed out by Sir Clifford Allbutt in the recent session, between the standard which may be properly maintained by a qualifying corporation and the minimum standard which the General Medical Council is bound to set up. In too much of the criticism one hears the Council is blamed for not setting a higher standard than at present. Our own opinion is that the course is already over-loaded, and not with the most important subjects. There is difficulty in making provision for instruction so necessary as that in the art of anæsthetics, while students waste months in learning a useless botany, and a still more useless *materia medica*. It is, as Sir Clifford Allbutt remarked, a grave statement to make that a man cannot be adequately educated in five years. Yet how many men at present conclude their medical course within five years of their starting their preliminary work? The decision come to by the Council that at least two years—twenty-four months—must be left for the final subjects, while excellent in itself, may not improbably have the effect of adding several months to the medical course.

#### The Political Crisis.

It is fortunate for the medical journalist that he stands in a position of complete detachment from party politics, that his duty is to regard the struggles of opposing schools and the strife of faction from the scientific and philosophical point of view. The medical man, however, ought not to shirk the duties of citizenship. He is bound to form an opinion and cast his vote at local and imperial elections; but no one is so able as he to recognise "how small, of all that human hearts endure, that part which laws or kings can cause or cure!" No one is so well able as the medical man to perceive at the present juncture that it matters not so much which party gains the victory, that nearly everything depends upon the use they make of it, and upon the help they may receive from the bulk of citizens in promoting necessary reforms and in administering new laws. All parties are agreed that the social problem, the problem of raising our people to a higher plane of civilisation, dominates everything. It is for this, mainly, that money is wanted. If sanitary laws, sanitary institutions and administration could be brought up to the level of science, a great many of the most glaring social sores would at once be

mitigated, and would soon be cured. Sanitation, in the broadest sense of the word, and education, in the widest and deepest sense of the word, are two of the chief remedies for existing evils. It is, however, a question whether legislation, however wisely constructed, will prove of much avail unless the spirit of the people from above downwards can be roused, and the feeling of patriotism be made to influence all classes. New social laws throw upon local governing bodies more and more work and responsibility, and unless these bodies are manned by independent and capable citizens, inefficiency, if not jobbery and corruption, will mar their labours. It is impossible effectually to legislate in advance of public opinion; the history of local government throughout the country disclosed in these columns from week to week exemplifies and illustrates this fundamental fact, and demonstrates its vital importance.

#### Oysters.

IN view of the latest report from Dr. Collingridge with regard to the traffic in contaminated oysters at Billingsgate Market, the only safe course for medical practitioners at present seems to be to forbid the use when uncooked of this excellent article of food to their patients, until such time as an undubitable guarantee of purity is forthcoming. Oysters form a most admirable item in many schemes of invalid dietary, but when even a remote risk of typhoid fever is involved their use cannot, of course, be entertained. Within the last week or two Dr. Collingridge has informed the City Corporation that a case of illness attributed to oysters was reported on November 12th at Paddington. The oysters had been bought in Billingsgate Market under the name of "Brightlingsea Ports," and were said to be of French origin and to have been relaid at Brightlingsea for more than a year. A sample of oysters from the same source was obtained from Billingsgate and submitted to Dr. Klein, who certified that they were polluted. A case of typhoid fever attributed to oysters was reported from Eastbourne. The patient, had eaten many oysters. These had been supplied by two firms in Billingsgate Market, one being the same as in the Paddington case. These oysters had been sold as "certified oysters from Dutch grounds," which "from analysis are shown to be perfectly pure." In each instance the facts were communicated to the Fishmongers' Company, who are inquiring into them. The action of the Fishmongers Company is so far satisfactory, but until the result of their inquiry is published, and some assurance that polluted oysters do not find their way to retailers through other sources than Billingsgate, the profession and the public will do well to act strictly upon the advice offered at the opening of this paragraph.

#### A Dublin Physician of the Eighteenth Century.

THE by-ways of medical history present much matter of interest—both personal and scientific—to those who wander through them, and we are glad to note that the number of explorers gradually increases. Among the most distinguished Dublin physicians of the eighteenth century—though hardly remembered now-a-days—was Edward Barry,

whose career Dr. Kirkpatrick recalls in the current number of *The Dublin Journal of Medical Science*. A native of Cork, and a graduate of Trinity College, where he probably studied anatomy under Bryan Robinson, Barry, became at the age of twenty, a pupil of the great Boerhaave, at Leyden. He practised in Cork for some twenty years, in Dublin for twenty more, and in London for some eight or nine, spending a few years in retirement ultimately at Bath. In Dublin he occupied a high position in the profession, being Regius Professor of Physic in the University, Physician-General to the Forces in Ireland, and three times President of the College of Physicians. He had a professional residence in College Green, but built for himself a beautiful house in the suburbs, now, curiously enough occupied again by a very distinguished physician. Barry, a singularly handsome man, polished and a shrewd man of the world, with a keen humour of his own, had the qualities which make a successful physician, but does not seem to have had any great scientific ability. One of his tenets—which raised the ire of Dr. Johnson—was that pulsation causes death by attrition, and that therefore, the way to prolong life is to retard pulsation. On the other hand he advocated surgical intervention in the treatment of empyema and abscess of the lung, and he held eminently sensible views on the beneficent part played by "animacules" in vegetable and animal putrefaction. He did not admit, however, that they had anything to do with the causation of disease. We hope that we may soon have another opportunity of enjoying the fruits of Dr. Kirkpatrick's researches into Dublin medical history of the eighteenth century.

## PERSONAL.

THE KING in Council has been pleased to appoint the Duke of Northumberland, Sir Hugh Bell, Bart., Miss E. M. N. Williams, M.D.Lond., D.P.H.Cantab., Mr. G. G. Butler, M.A., Mr. J. S. G. Pemberton, M.A., and Mr. John Wilson, M.P., to be members of the Senate of the University of Durham.

MR. S. E. GARDEN, F.R.C.S.I., has been elected Surgeon to the Orthopædic Hospital, Dublin.

PROFESSOR J. T. J. MORRISON presided at the recent dinner of the past and present students of the Birmingham Medical School.

MAINLY through the efforts of Dr. W. G. Aitchison Robertson, a society has been started in Edinburgh to promote the practice of cremation.

DR. DAVID D. F. MACINTYRE has been appointed assistant medical officer to Dr. Burlaw, chief medical officer to the Board of Trade at Liverpool.

THE Metropolitan Hospital will be re-opened on December 20th by the Lord Mayor of London, accompanied by the Lady Mayoress and the Sheriffs of the City of London.

THE Queen's Hospital for Children, Hackney, has received from the Duke of Newcastle a new X-ray apparatus to replace the installation furnished by the same donor some ten years ago.

SIR T. LAUDER BRUNTON has been appointed chairman of the Physiological Committee, and Professor H. R. Kenwood, M.B., D.P.H., and Professor W. J. R. Simpson, C.M.G., M.D., F.R.C.P., D.P.H., have been appointed representatives of the University of London at the Third International Congress of School Hygiene, to be held at Paris in August, 1910.

CAPTAIN J. E. CLEMENTS, I.M.S., Superintendent of the Central Gaol, Montgomery, India, was recently stabbed in the back by a Pathan prisoner, but is reported to be progressing favourably.

COLONEL T. P. WOODHOUSE, Army Medical Service, has been appointed Principal Medical Officer Scottish Command, in succession to Colonel T. M. Corker, who is proceeding to Egypt for duty.

DR. J. ROSE BRADFORD, F.R.S., Sir C. Cameron, Kt., C.B., Dr. L. C. Parkes, Dr. M. S. Pembrey, Sir F. Treves, Bt., G.C.V.O., C.B., have been re-appointed to the Army Medical Advisory Board.

DR. L. S. McMANUS, seconded by Dr. J. T. Richards, is endeavouring to arrange for the removal of the offensive inscription on the Brown Dog Memorial at Battersea, and to substitute a truthful one.

MAJOR-GENERAL LORD CHEYLESMORE, chairman of the Brompton Hospital, opened an exhibition organised by the National Association for the Prevention of Consumption, in the Chelsea Town Hall on December 7th.

A VALUABLE collection of books and other relics of the famous Dr. Joseph Priestley, the discoverer of oxygen, has been presented to the library of the University of Birmingham by Miss S. P. Wainright, one of his descendants.

MR. W. B. HARDY, M.A., F.R.S., Professor A. F. Stanley Kent, M.A., Dr. V. H. Veley, D.Sc., M.A., F.R.S., and Professor Swale Vincent, M.D., D.Sc., have been added to the panel of lecturers in physiology at London University.

DR. R. O. MOON, who is standing in the Liberal interest for East Marylebone, London, served in the Græco-Turkish War in 1897, and in 1900 was repeatedly under fire as a trooper in the Hampshire Yeomanry in the South African War.

DR. JAMES WHITEFORD, Greenock, who has completed 50 years as a medical practitioner, has been entertained in the Watt Museum Hall, Greenock, by a numerous company of his patients and friends. He was presented with an address and a cheque for £930.

DR. C. HUBERT ROBERTS, M.D., F.R.C.S., a physician to in-patients; Dr. R. D. Maxwell, M.D., F.R.C.S., a physician to out-patients; Mr. Thomas Crisp English, M.B., F.R.C.S., surgeon (non-obstetric), have been appointed to the staff of Queen Charlotte's Lying-in Hospital.

SIR GEORGE HARE PHILIPSON, M.B., the President of the College, and Mr. J. E. Gibson, M.A., have been elected as the two representatives of the Council of the College of Medicine, Newcastle-on-Tyne, to act on the Senate, as constituted under the University of Durham Act, 1908, while Dr. David Drummond and Professor Robert Howden have been appointed to represent the Academic Board of the College on the new Senate.

THE following will, it is stated, contest Parliamentary seats against their names at the coming election:—Dr. C. Addison (L.), Hoxton; Dr. W. A. Chapple (L.), Stirlingshire; Dr. G. Coates (U.), Lichfield; Sir W. J. Collins (L.), St. Pancras, West; Dr. T. Eastham (U.), Hyde; The Right Hon. Sir W. Foster (L.), Ilkeston; Dr. F. E. Fremantle (U.), Rotherhithe; Dr. A. Hillier (U.), North Hitchin, Hertfordshire; Dr. H. S. Lunn (L.), Boston; Dr. J. E. Molson (U.), Bethnal Green; Dr. R. O. Moon (R.), Marylebone East; Dr. Permewan, of Liverpool (L.), Bootle; Sir G. H. Pollard (L.), Eccles; Dr. A. R. Rainy (L.), Kilmarnock District; Dr. V. H. Rutherford (L.), Brentford.

# A CLINICAL LECTURE ON THE PROGNOSIS AND ÆTIOLOGY OF MITRAL INCOMPETENCE. (a)

By Sir JOHN F. H. BROADBENT, Bart., M.D.Oxon., F.R.C.P.Lond.,

Physician to St. Mary's Hospital, Paddington.

THE range of possibilities as regards prognosis is wider in mitral incompetence than in any other valvular affection. The incompetence may be due to a variety of causes, and inasmuch as the prognosis will to a great extent depend on the ætiology of the affection, I have selected as the title for my paper "The Prognosis and Ætiology of Mitral Incompetence."

The varieties of mitral incompetence, ætiologically, may be divided into two main groups:—

- (1) Incompetence due to actual lesion of the valves.
- (2) Incompetence resulting from dilatation of the left ventricle unattended with any lesion of the valves.

Rheumatic endocarditis is by far the commonest ætiological factor in Group I. Sometimes scarlet fever may be responsible. Pneumococcal or streptococcal infection may also set up endocarditis, but in this event the variety known as "malignant endocarditis" more commonly results and usually proves fatal.

Chronic degenerative change giving rise to some thickening and rigidity of the valves may be a cause of incompetence setting in in the later periods of life. This is of far greater importance in the case of the aortic than the mitral valve.

A large proportion of cases of mitral incompetence in which we are called upon to give a prognosis, come before us as old-established chronic valvular lesions traceable to rheumatic endocarditis. In this group our task will be a comparatively easy one. We must first proceed by the data at our command to endeavour to estimate the extent of the lesion.

*The character of the murmur and the first sound will afford important information.* If the murmur is not conducted much beyond the apex beat, is not audible in the back, and does not replace to any great extent the first sound, or if it follows the first sound at a brief but appreciable interval—i.e., is late systolic in time—the regurgitation is presumably slight in amount. If the systolic murmur replaces entirely or greatly modifies the first sound, we may infer that the lesion is severe, inasmuch as the intra-ventricular pressure is so reduced by the regurgitation through the mitral orifice that it is insufficient to make the muscular wall, as it suddenly contracts down on the contained blood, taut enough to generate a first sound.

As the work of compensation falls mainly on the right ventricle, the degree of enlargement and hypertrophy of the right ventricle will be an important guide to the severity of the mitral lesion. Enlargement of the right ventricle will cause displacement outwards and somewhat downwards of the apex beat and undue right ventricle impulse in the epigastrium, and in proportion as these are pronounced we may infer the degree of severity of the mitral lesion. The degree of accentuation of the pulmonic second sound will also afford useful information as to the increase of pressure in the pulmonary circulation.

*Symptoms.*—A very important factor in prognosis will be the readiness with which symptoms of cardiac distress are induced, or a breakdown of compensation occurs.

Many people are going about with a mitral lesion who are utterly ignorant of the fact, and lead an ordinary life, taking plenty of exercise without suffering any inconvenience. Here we shall find little appreciable evidence of compensatory changes, and it is obvious that the lesion in such cases is so slight as to be almost negligible, whatever the character of the murmur.

(a) Delivered at the Medical Graduates' College and Polyclinic.

In other cases the patient, though unconscious of any heart affection, comes to consult one for shortness of breath on going uphill or upstairs, though comfortable when taking ordinary walking exercise. In these cases one will usually find accentuation of the pulmonic second sound, and evidence of compensatory changes in the shape of hypertrophy of the right ventricle with some displacement outwards of the apex beat.

It is important in considering the prognosis of this class of cases to bear in mind the question of the reserve power of the heart. In the healthy heart there is an enormous reserve power which enables it to respond to the increased demands entailed by exertion and exercise without any symptoms or ill-effect. This reserve power is diminished if one of the valves be damaged, even if efficient compensation has taken place, in proportion to the severity of the valvular lesion, so that if the heart be over-taxed, warning symptoms, such as dyspnoea, præcordial pain, etc., set in, and if the undue exertion be persisted in, breakdown of compensation will result. In these cases it will be necessary to lay down strict rules as to the amount and nature of the exercise allowed, and to explain to the patient that these symptoms are in the nature of a warning to desist at once from the exertion which induces them.

In regard to prognosis in cases of complete breakdown of compensation in which enlargement of the liver, dropsy, etc., are present, much will depend on whether the breakdown has been induced by undue exertion, or an attack of bronchitis, or has occurred while the patient has been taking all possible precautions. In the former event it is remarkable how time and again they will respond to suitable treatment by rest and the administration of purgatives and digitalis. In the latter the prognosis is necessarily unfavourable, the more so as the onset of symptoms is likely to be due to commencing degenerative change in the cardiac muscle.

A danger to be apprehended in the years to come in cases of mitral incompetence that come under our notice shortly after an attack of endocarditis, which should make our prognosis guarded even in apparently favourable cases, is the possibility of the onset in the future of mitral stenosis from cicatricial contraction of the damaged valves. My impression is, that in many cases the patient who has had mitral incompetence for some years, it may be, only comes up for medical advice when mitral stenosis has set in and symptoms attributable to that affection begin to present themselves.

## "MITRAL INCOMPETENCE DUE TO DILATATION OF THE MITRAL ORIFICE."

In dealing with the question of prognosis in mitral incompetence due to dilatation of the left ventricle, without actual lesion of the valves, the ætiological factors are of extreme importance, and are many and varied.

When during an attack of rheumatism a systolic murmur develops at the apex indicative of mitral incompetence, it is often a difficult matter to decide whether this is due to damage to the valves from endocarditis or is the result of dilatation of the left ventricle.

If the murmur is musical in character or changes in quality while the patient is under observation, we may be fairly certain that it is the result of actual lesion to the valves. If there is little evidence of dilatation of the ventricle, only slight displacement of

the apex beat, and no great increase in the area of cardiac dullness, and the murmur is soft and blowing in character, it may be necessary to wait for some weeks after the subsidence of the attack before we can decide with certainty as to its nature.

If after the subsidence of an attack of rheumatic pericarditis in a child we find that the cavities of the heart, both right and left, remain greatly dilated, and notice that there are marked symptoms of cardiac distress such as rapid respiration and pulse, orthopnoea, and perhaps enlargement of the liver, and on auscultation at the apex we hear a loud, blowing systolic murmur, we may perhaps be inclined to attribute these in part to a lesion of the mitral valve. Such may, or may not, be present, but is of minor importance, as in these cases the extreme dilatation and accompanying symptoms are the consequence, not of a valvular lesion, but of damage to the myocardium inflicted by the toxins of the rheumatic micro-organisms. Microscopically, in fatal cases we find evidence of this damage in the loss of striation of the cardiac muscle, and granular and fatty degeneration of the muscle fibres, and the areas of small, rounded infiltration which scattered throughout.

Inasmuch as the right ventricle is usually affected in the same degree as the left, and, being thinner-walled, dilates even more readily, there is no compensatory mechanism available to counteract the effects of the mitral incompetence, and in severe or prolonged attacks, enlargement of the liver, distressing dyspnoea, and dropsy may set in. If the patient survives the attack, and the heart does not recover from the dilatation, but remains permanently enlarged, with a loud, blowing, systolic murmur at the apex heard through at the back, even though some hypertrophy set in, the prognosis as regards efficiency of compensation or prolonged life is necessarily unfavourable.

There are many causes, other than rheumatism, of dilatation of the left ventricle leading to mitral incompetence, and I now propose to deal with some of these.

In *Graves' disease* a mitral systolic murmur is frequently present, associated with a varying degree of cardiac dilatation. In a small percentage of cases the dilatation may become extreme and prove fatal. In the majority of cases recovery takes place when the *Graves' syndrome* subsides. In a case of a lady, *æt.* 40, recently under my care, in whom *Graves' disease* had developed somewhat suddenly, the heart was enormously dilated, the apex beat being in the sixth space in the axillary line. A loud, blowing, systolic murmur was present, conducted to the axilla and heard in the back, and there was dyspnoea with enlargement of the liver and slight dropsy. After a month in bed, and treatment with digitalis and bromides, the dropsy and enlargement of the liver subsided, but there was still tachycardia and breathlessness, and the cavities of the heart remained much the same. Six months later the tachycardia had subsided, the swelling of the thyroid was greatly reduced, and the apex beat had come into the nipple line, but a loud systolic murmur was still present. A year later the systolic murmur had entirely disappeared, there was only slight breathlessness on exertion, and she had put on 2 stone in weight. She now enjoys excellent health.

The exact cause of the dilatation in *Graves' disease* is not altogether clear. The rapid action of the heart, so constantly present, must tend to exhaust the muscle, and might be a predisposing cause; but the relaxed condition of the vessels, which is so remarkable a feature, will, on the other hand, relieve the heart of work to a great extent, and I think we must attribute the dilatation in part, at any rate, to the toxic action of the excessive thyroid secretion on the cardiac muscle.

*Chronic alcoholism* is not infrequently a cause of mitral incompetence in later life. As the dilatation of the left ventricle, which is responsible for the incompetence, is usually due to degenerative changes in the cardiac muscle, the prognosis is necessarily unfavourable. The regurgitation may, however, be only slight in amount, and the immediate cause of danger be cirrhosis of the liver or multiple neuritis. When

the regurgitation is considerable, rest and suitable treatment may cause a marked temporary improvement in the symptoms, and a certain *modus vivendi* be established if the patient can have every care and attention. On return to ordinary life, however, a relapse usually occurs, even if the patient can be induced to give up alcohol altogether. In hospital patients, consequently, the prognosis is more unfavourable than in the wealthier classes.

Some two years ago I was called to see a lady of about 50 years of age in whose case the outbreak of delirium tremens had made manifest for the first time the fact that she was a secret drinker. The pulse was 120, the heart apex beat was in the sixth space in the mid-axillary line, and a loud, blowing, systolic murmur was present; the liver was enlarged, and there was some oedema of the lungs. She improved gradually, and in two months' time was able to get about again and take short walks on the level. The pulse rate was 84, and the heart apex had come into the anterior axillary line, and though the murmur was present it was much less pronounced. As a result of over-exertion while on a holiday, the heart again broke down, and rest in bed for some weeks was necessitated before the working balance was again restored. By dint of great care this has been maintained, but a loud systolic murmur is still present, and there is practically no reserve power available that will allow of undue exertion without causing a relapse.

The degree in which the cardiac muscle is affected is necessarily an important point in prognosis, and this can only be estimated by the response to treatment in each individual case. Beer is, I think, more injurious than spirits in that it has a greater tendency to produce fatty degeneration of the cardiac muscle. It is remarkable how long secret drinking of spirits by the female sex may go on before any evidence of cardiac breakdown occurs. Tachycardia is of common occurrence and may persist for years. In two cases I saw from time to time for several years I was inclined to make an erroneous diagnosis of *Graves' disease* on the strength of the tachycardia and tremor, as, of course, the utmost these ladies admitted they took in the way of alcohol, was a glass of claret for dinner, and it might be occasionally a little brandy for a "faint feeling."

*Slight degrees of mitral incompetence unattended by symptoms.*—In young and apparently healthy adults a soft systolic mitral murmur may be present, not traceable to rheumatism or any recent illness, and giving rise to no symptom of any kind, so that it may only be discovered more or less by chance.

To give three instances which have come under my notice within the last three months:—

CASE 1.—W. H., a medical student, in the best of health and able to take active exercise without any symptoms of distress, came to consult me because he was thinking of going into the Army Medical Service, and he wished to be examined to see that he was medically fit. On examining the heart, I found a soft, blowing systolic murmur at the apex. There was some enlargement of the left ventricle, the apex beat being just outside the nipple line in the fifth space. It was somewhat forcible and thrusting in character. The blood pressure was rather high, 160 mm. by the Riva Rocci instrument. The urine was normal. There was no history of rheumatism at any time.

In searching for a possible cause of the onset of the mitral incompetence, I ascertained that six months previously he had a sharp attack of influenza, and that ten days after he was convalescent from this, he had gone for a 20 mile run with the harriers. Though not distressed at the time, he had not felt up to the mark or equal to much exertion for some time after, and I take it that the violent exercise so soon after his illness may have induced dilatation of the left ventricle, and that the mitral incompetence dated from this. The high arterial tension would also be an important predisposing cause.

CASE 2.—A man, *æt.* 33, came to consult me with the history that he had been working hard for some time in a close, badly-ventilated office, and felt generally run down in health. He found that he could not take

active exercise and play golf as he used to every week-end without getting short of breath and very soon tired. The pulse was regular and of low tension. On examining the heart, the apex beat was scarcely palpable in the fifth space just inside the nipple line, and a blowing systolic murmur was audible over a limited area. There was no appreciable increase in the area of cardiac dullness. He was somewhat anæmic, but well nourished. I advised him to take a complete holiday for some weeks in a bracing climate, and take moderate exercise, strictly limited in amount at first, but gradually increasing in duration each day till he found he could walk uphill or play golf without any dyspnoea. He improved rapidly, and two months later I heard from his doctor that he was in excellent health, and that the murmur was then only present after exertion.

CASE 3.—The third case was that of a man, æt. 27, who had been doing arduous work as a mining engineer in South Africa, and had recently recovered from a severe head injury which necessitated trephining. When I saw him on his arrival in England on July 8th, he was poorly nourished, and complained of headache and of feeling tired on slight exertion. A soft systolic mitral murmur was audible at the apex, which was in the fifth space just inside the nipple line. There was no appreciable increase in the area of cardiac dullness. The pulse was regular 74, and of low tension.

After a holiday of two months at a bracing seaside health resort, he had put on two stone in weight and said he felt in excellent health. The murmur was still present, but scarcely audible except after exertion. He then went off on a shooting expedition abroad, and I heard that he was able to do a long day's tramp without feeling fatigue or ill effect.

In these last two cases there was no evidence of any appreciable dilatation of the left ventricle, on percussion or any displacement of the apex beat, nor were the cardiac symptoms in any way pronounced.

In seeking for an explanation of the mitral murmur in these and other similar cases, we must bear in mind that the mitral orifice is not like the aortic orifice, a firm, unyielding cartilaginous ring, but is a fibrous structure surrounded by a band of circular muscle fibres, which by their contraction in systole play an important part in maintaining the efficient closure of the valves. Further, the papillary muscles attached by the chordæ tendinæ to the margin of the valves are also factors in the mechanism which secures accurate apposition of the valvular curtains by preventing their undue displacement upwards by the strain to which they are subjected during the ventricular systole. It is thus essential for the efficient closure of the mitral orifice that the muscular ring surrounding it and the muscoli papillares controlling the valves should be in good working order.

It is readily conceivable, therefore, that impairment of tonicity of this band of circular muscle fibres and consequent imperfect contraction during systole of the ventricle may render the valves incompetent from dilatation of the ring to which they are attached. Similarly, impairment of tonicity of the ventricle, affecting also the muscoli papillares so that they do not con-also the muscoli papillares so that they do not con-also the muscoli papillares so that they do not con-also the muscoli papillares so that they do not con-also the muscoli papillares so that they do not con-also the muscoli papillares so that they do not con-

It is to one or both of these causes combined that I attribute the mitral incompetence in the two last-mentioned cases from loss of general and cardiac muscular tone, and I should expect that in a short time, given favourable circumstances, the heart would recover its tone and the murmurs entirely disappear. To the same causation we may attribute the transitory mitral murmurs which may make their appearance during the course of acute febrile disorders, the apical murmurs in anæmia, and the mitral systolic murmurs met with in some cases of chorea and slighter degrees of rheumatism in children, which eventually disappear entirely.

There are many other varieties of mitral incompetence, such as that due to prolonged high arterial tension, to chronic degenerative change in the valves, and that secondary to disease of the aortic valves, and so on, which time will not permit me to discuss, as

I fear I have already overstepped the limit of that allotted to me.

NOTE.—A Clinical Lecture by a well-known teacher appears in each number of this journal. The lecture for next week will be by D'Arcy Power, F.R.C.S., Surgeon to St. Bartholomew's Hospital. Subject "Varicocele."

## ORIGINAL PAPERS.

### SOME REMARKS ON THE PERITONEUM AND PERITONITIS. (a)

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(Concluded from page 608.)

AGAIN, an appendix, perforated and sloughing may have to be left behind, against the will of the operator, if it be so firmly embedded in the walls of the cæcum, or so obscured by dense adhesion of surrounding gut, that its removal would endanger the vitality of the intestinal walls adjacent. Of course, the abdominal contents will submit tamely to considerable violence, and one knows quite well that the mere formation of a fæcal fistula is often of comparatively little moment; one must judge by the state of the tissues what risks to run, remembering that the risk to choose, should be rather that of damaging the peritoneum or gut, when one is sure of being able to repair it, than the risk of leaving behind an inexhaustible source of renewed infection. One may find a pelvis full of pus only imperfectly isolated, and, operating through this area, remove "tubes" full of bursting with pus, perhaps even with pus exuding from their abdominal ostia, and yet scarcely endanger the general peritoneal cavity. But if the removal of "tubes," full of semi-solid or caseous purulent detritus, which proves sterile on inoculation, necessitates the separation of numerous adhesions of the overlying loops of intestines to one another and to the parietes, then, even if the adhesions be of old standing, all the resources of surgery may be taxed to their utmost to avoid a fatal infection of the whole cavity; so easily do virulent organism find their way out through the breaches of continuity left by separation of adhesions even where every care has been exercised. Turbid fluid is not necessarily a danger, on the contrary it is probably the chief hope for the patient; fluid definitely purulent, has probably done all its protective work, and will be better outside the abdomen; where pus is universal, complete irrigation would perhaps be justifiable could it be done without undue disturbance of the contents, and without mechanical damage to the surfaces manipulated. At the recent congress (38) of the German Surgical Society a majority of surgeons were, indeed, in favour of irrigation in the treatment of generalised peritonitis. Some went so far as to recommend complete breaking down of all recent adhesions (36), (37), (38), (39) to ensure thorough washing out. My personal opinion is, that upon the operating table it is impossible to wash out the whole, or anything like the whole of the purulent contents; moreover, in my experience, anything but the most perfunctory irrigation is attended with danger to the sacred peritoneal surfaces. Attempts have been made by the introduction of long tubes specially adapted to reach distant parts of the cavity, to maintain continuous or intermittent irrigation. (40)

Fortunately, however, this is not necessary, Murphy (14), (41) has introduced continuous infusion of saline solution by the rectum, and has thereby contributed enormously to the progress of surgery, in the treat-

(a) A Paper read before the Cork Medical and Surgical Society, October, 1909.

ment of acute infections of the peritoneum. By introducing saline fluid into the rectum under pressure just sufficient to ensure its running in at about the rate of a pint an hour, enormous quantities can be absorbed. Not only are the peripheral vessels filled, the vascular tone re-established and the heart thus revived, but it is possible to promote exudation into the peritoneal cavity over the whole area, and by the adoption of the "Fowler" position, *i.e.*, with the body inclined at an angle of 70 degrees to the horizontal, together with the provision of a means of escape for the fluid at a lower level than the dome of the diaphragm, it is possible to ensure a thorough flushing of the whole cavity towards the exterior. For a few hours after drainage has been established, it is possible to get such a current of fluid flowing across the infected area, towards the dressings, that the mattress may be soaked (if no mackintosh be in place) and the water drip on to the floor underneath the bed, without the escape of one drop from the anus. If for any reason the rectum cannot be employed—though the tube is tolerated extremely well—the fluid may be introduced through large needles into the subcutaneous tissues of the thighs, and will be absorbed almost at the same rate; this method, however, has the disadvantage that there is often, subsequently, a great deal of pain about the site of infusion.

Nor does the employment of the rectal infusion method, or proctoclysis, for which special apparatus has been devised, (42), (43) preclude the employment of the various means for evacuating the bowels. In the first place the most efficient time for proctoclysis is the 10 or 12 hours immediately succeeding operation, and, in the second, if the apparatus be properly arranged, the passage of flatus by the tube itself, is permitted without difficulty; when once free action of the bowels is established, saline infusion may be stopped or intermitted. In the ordinary way, half a grain or one grain of calomel, repeated hourly, beginning an hour or two after the operation, is the most efficient aperient; if the calomel, as is often the case, produces reflex vomiting, small doses of salts, also repeated hourly, make an efficient substitute. When it is thought desirable to use strychnine at four-hourly intervals, subsequently to operation it may be suitably combined with physostigmine sulphate or Eserine salicylate (44), (45) one-fortieth to one-eightieth of a grain. Others have used castor-oil (46) injected into a coil of small intestine at the end of the operation, and the injection of magnesium sulphate through an enterotomy wound is commonly practised. (47) Spartein sulphate and digalen have also been used.

On the question of enterotomy there is considerable difference of opinion. Personally, I use it in cases in which the contents of partially paralysed gut are chiefly fluid, and especially when there is regurgitation of intestinal contents into the stomach, or when the vomit is foul. A single incision suffices, when Moynihan's tube is used, to empty five or six feet of gut; it is remarkable how intestine which has distended rapidly during the course of an operation, in which the walls seem very thin, or on the other hand, sodden, will recover and contract when the contents are evacuated. The procedure can be carried out with a minimum of risk of soiling the wound area. (48), (49) Lavage of the stomach is properly employed in these cases and has undoubted advantages.

Sprengel, who originally advocated enterostomy has now abandoned it except in special cases, and that attitude is probably correct. It is an important and valuable method, but not one for general application as a means of treating the peritonitis. (50)

Krogius (39) has advocated the formation of a fistula by Witzel's method, in the presence of meteorism. It has even been proposed to treat persistent vomiting by gastrostomy (51) combined with enterostomy. Noetzel thinks enterostomy useless in cases that won't get well without it.

The question of drainage is a difficult one. When Surgical Registrar, I was much struck with the superior results obtained in cases of appendix abscess and peri-

tonitis by those surgeons who left a large wound widely open and packed with gauze, as compared with those who attempted to suture the wound (52) up to and round the drainage tube. Yet the pendulum has swung back so much that some surgeons now advocate total suture of the abdomen even in diffuse suppurative peritonitis, and many aim at "restoring the intra-abdominal pressure," which is, of course, the efficient agent in securing escape of fluid up drainage tubes from the pelvis and other deep-lying parts. Sprengel (53) stated that he had often seen necrosis of fascia when septic cases were sewn up; this might be anticipated.

Tube drainage, however, applied to the pelvis, the flanks, or even posteriorly, cannot remain effective for more than a few hours. It is of service mainly in facilitating the diversion of the peritoneal current from its normal direction towards the diaphragm: a diversion also assisted by the "Fowler" or semi-upright position. Drainage by tampon undoubtedly has the disadvantage that it is apt to hinder peristalsis, and when employed extensively in the pelvis may contribute seriously to the persistence of constipation.

My own practice is to drain the pelvis when it has contained much pus, for twenty-four hours, by glass tube with a "wick" of ribbon gauze in the lumen. If there has been pus in the flanks they are drained by short, stout rubber tubes; that on the right side drains the subhepatic space if necessary, but these tubes are removed within forty-eight hours, those in the flanks being replaced by gauze, that in the pelvis by a rubber tube of smaller calibre, which is rapidly shortened day by day. Where the focus of infection cannot be removed entirely, or where its removal leaves behind much densely infiltrated or sloughing tissue, or where a definite abscess cavity has been opened, the best means, in my opinion, is a split india-rubber tube filled with iodoform gauze, or gauze surrounded by rubber-dam, the "cigarette" drain. It can be disposed so as to leave the gauze surface in contact with the sloughy area and to protect "new" intestine from contact with the raw area. Tamponade is used where there is much bleeding from granulating surfaces, or detached adhesions, or where the demands of time preclude a partial suture of the abdominal wound. Recognising the difficulty of maintaining persistent drainage some have tried to adopt specially shaped glass tubes. For example, Janssen, (54) uses a bunch of globe-ended glass tubes or "Kügeldrains," which he surrounds with a sheet of gauze, but it is very doubtful if this manoeuvre really postpones the agglutination of intestinal coils and omentum which so quickly invalidates all ordinary attempts at drainage. When gauze wicks or tampons are employed, it has been suggested that the outer end ought to be lower than the inner; (52) this is unnecessary, because the outer dressing is in mechanical contact and sub-serves any syphon-purpose that may be involved. Gauze tampons should not be removed as a whole for forty-eight or seventy-two hours, as the damaged gut to which they may be applied is apt to be very adherent up till that time. The envelope of rubber-dam greatly facilitates removal.

The question of adhesions is one that exercises the minds of all surgeons. After the excision of a perforated appendix in an abdomen not yet extensively infected—so far as inspection goes—but at the same time not shut off by adhesions, one expects nowadays to secure a favourable course in the after-treatment. Now and again, however, especially I think when the pneumococcus is the infective, or one of the infective agents, intestinal obstruction sets in, and on re-opening the abdomen there may be found firm and continuous adhesions of coils of gut in the neighbourhood, acutely angulated, and all attempts at unloosening them may result in tearing loose the peritoneal coat—that dread danger—rather than in separation of the very recent, hardly-yet organised, tissue. If one can distinguish for certain a coil well above that involved, it is probably best to anastomose it to intestine below, in spite of the presence of sepsis, rather than attempt



extensive separation. Enterostomy may be justified. Everyone has been surprised at the remarkable way in which adhesions will, at times, disappear. An abdomen in which, at the time of an urgency operation it seemed impossible to find one's way in any direction, when re-opened later may disclose no visible adhesions. (56) On the other hand, after a comparatively simple operation where no adverse symptom hinders the immediate progress of the case, a great deal of trouble may arise subsequently by reason of slight or extensive adhesions. Mere attachment of a tag of omentum to the abdominal scar may lead to incapacitating discomfort in a neurotically-inclined subject. A slender band of adhesions crossing the colon may suffice to produce chronic intestinal obstruction with attacks of very severe colicky pain. It is more common, however, to find several coils of small intestine united along each arm of every loop by broad sheets of thin fibrous tissue, comparatively easy to separate and tie off as a rule, but here and there perhaps constricting the gut in a manner very difficult to relieve. It seems almost impossible to divine in which cases adhesions are to be expected, and almost equally difficult to prevent their formation. It is probable that adhesions form, as a rule, only when too denuded or abraded surfaces come in contact; that a smooth undamaged peritoneal surface does not adhere to a raw area with which it comes in contact casually, although it may, of course, do so if it remain in close apposition.

But even two raw surfaces do not necessarily adhere: Von Dembrowski (57) scrubbed the peritoneum of a dog with a hard tooth-brush, without producing adhesion; foreign bodies, such as tinctacks (58) or pins (59) will sometimes simply be encysted, at others may produce extensive adhesions. Swabs (60) will sometimes remain for long periods without giving trouble. In a recent instance, fluid from a case of ascites, obtained by tapping, was found to contain a quantity of carbon which had been administered as charcoal. The puncture of the gut produced no adverse symptoms.

The peritoneum possesses remarkable powers of encystment. After rupture of a gastric ulcer, or of the small intestine, vegetable particles (61), (62) may be found encysted, and even pedunculated upon the serous surface. Similarly with cancer cells or with droplets of vaseline (63) introduced experimentally.

Many experiments have been made to devise some means of preventing the formation of adhesions. Sterile oil, (64), (65), (66) gelatine, lanoline, paraffin, gum-arabic, have all been tried and none have any effect. The more irritating fatty-acids, such as cottonseed or linseed oil, or palmitic acid, in fact, produce great plastic reaction and are a direct menace to life.

When sterile oil (67) is used 10 to 50 c.cm. are poured into the belly at the end of operation. Some surgeons think that a quantity of saline fluid left in the abdomen serves a purpose in preventing adhesions; this at least is an innocuous method. All we can do at present is to avoid damage to, or dessication (68) of, the exposed peritoneum; to avoid the use of chemical irritants in the abdominal cavity; to cover exposed areas wherever possible, by suture or omental grafts (69) or even by some such medium as cargile membrane. Very important is the early promotion of intestinal movements. To this end strychnine and physostigmine may certainly be addressed and in several cases I have found massage of value in dispelling symptoms presumably attributable to adhesions.

As to the use of sera and vaccines, I can only say that in acute cases, sera have little if any influence, and the preparation of vaccines requires too long to permit their use in the urgent stages; but for clearing up persistent sinuses after local peritonitis there is no doubt that vaccines, properly prepared in accordance with the actual bacterial content of the discharge, have a field of usefulness.

A knowledge of the natural means of defence of the peritoneum and a recognition of the points at which its armour is weak, enable us to interfere with

discretion, and to render aid diplomatically. Before anything was known of the mechanism of defence, surgeons avoided meddling with the peritoneum as they avoided the devil; now we avoid undue intervention on the principle of letting well alone. We know exactly how we can aid the natural powers of resistance, and we act with promptitude, with the least possible expenditure of time at the table, and with severe restrictions. One has, however, always to be keeping oneself up to the proper earnestness in prosecuting the non-operative after-treatment. It is not enough to put a pillow under the patient's shoulders and call it the "Fowler" position. The body should be inclined at from 60 to 80 degrees to the bed, and that position requires some ingenuity on the part of the nurse, for its maintenance. Merely to put a syringe of two of saline into the rectum is not carrying out proctoclysis. Things are not right unless at least one pint is flowing steadily into the rectum per hour, hour after hour, without discomfort to the patient. Whatever aperient is employed must be followed up steadily until it succeeds. It is difficult to impress upon house surgeons and ward sisters that the critical time is not that spent in the theatre, but the 24 hours next following. Above all, time is the important factor; the bacteriologist may have to sit up all night to make his vaccine, but unless he does so, he may as well not make it at all in some cases. A delay of an hour or two on the part of the surgeon in doing the operation may rob a patient of a good chance of life.

It is, of course, to the same protective power enjoyed by the peritoneum that we owe the impunity with which we now perform routine anastomoses and other intra-abdominal operations. No surgeon who is also a bacteriologist thinks that his anastomoses, even when performed by crushing or by special methods that profess to avoid opening the lumen to daylight, are accomplished without infecting the peritoneum. He knows, however, that unless he is unfortunate enough to let loose a lurking devil, such as the *b. aerogenes capsulatus*, he can rely on the peritoneum to deal with all organisms that escape. The experiences of military surgery, and *a priori* considerations, suggest the advisability of very careful attention to the state of the intestines, both as regards food and as regards the bacterial content, before a deliberate operation. It might be advisable to displace the normal but potentially virulent organisms by a course of lactic acid bacilli which are not pathogenic.

It is unnecessary to say that the power of the peritoneum to take care of itself does not in any way absolve us from the duty of protecting it from insult, but it is satisfactory to feel that in a case, for example, of gangrenous gut in a hernial sac, the abdomen may be opened with impunity and a reasonable chance of performing an anastomosis through an adequate opening be obtained without fear of setting up a fatal peritonitis.

The physiology I have recapitulated is not very new; the practical measures described are in common practice, and most of the observations are trite, to say the least of it, but I trust you will agree with me that no harm is done by an occasional recitation of the faith that is in us.

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## THE EARLY DIAGNOSIS OF SUPPURATIONS OF THE MASTOID.

By A. JANSEN, M.D.,  
Of Berlin.

[SPECIALLY REPORTED FOR THIS JOURNAL.]

So soon as suppurations of the middle ear pass beyond the limits of the cavity of the tympanum, into the region of the mastoid, the character of the mischief becomes changed. It is, therefore, important to recognise the passing of the inflammation from the one part to the other early. Unfortunately, the complication often runs on for some time without any symptom, so that a recognition of it is impossible. Sooner or later, however, the inflammation of the middle ear undergoes changes due to the complication. The aetiological factor, and constitutional diseases, along with the anatomical structure of the mastoid are of importance. Although in acute otitis media the tympanic cavity towards the "antrum" becomes closed frequently, from adhesions of the swollen mucous membrane, in a number of severe cases the mucous surface in the antrum becomes inflamed also. With the healing of the inflammation in the tympanic cavity that in the antrum also subsides spontaneously. So soon as the mastoid itself, however, becomes diseased, the condition becomes worse as regards spontaneous healing, and when suppuration has actually occurred, spontaneous recovery takes place no longer.

The development of suppuration in the mastoid and its spread depend in the first instance on the form of this bony part, the structure of which is exceedingly complicated. The mastoid process may be very small, or it may develop to a large size in all dimensions. It may be composed of compact ivory-like bone, or of a softer, spongy bony substance. The antrum also varies very much, usually approaching the size of a pea, frequently smaller, it may be so small as to appear as only a small appendage to the tympanic cavity. These varied conditions of the antrum and bones are directly decisive for the kind and extent of the suppuration in the mastoid. Suppuration in a small, high lying antrum is much more favourable for spontaneous recovery, and especially when the bones are sclerosed than suppuration in a large antrum with deep recesses in which stagnation is always present. Suppurations of the middle ear that are complicated by disease of the mastoid process, have an influence on the secretion from the tympanum, both in regard to quantity and appearance. An unusually large quantity of pus, and a preponderance of pure pus in it, are an early and

sure sign of suppuration of the mastoid with free outflow from the tympanic cavity, frequently long before any other signs are present. In chronic cases the foul smell that persists in spite of careful cleansing as well as the mucoid character of the discharge, point to decomposition in the antrum and mastoid, and they in combination with large quantities of lamellae of cholesteotoma, form certain indications of suppuration in the mastoid. On examining the tympanum we see in the unceasing flow of pus through the perforation, a very early symptom of retention in the antrum and mastoid. When we see this unceasing welling out of the discharge at a time when the secretion in the regular course of the otitis media should be less it is so much the more characteristic, as with moderate outflow of pus the inflammatory changes in and about the mastoid may undergo great extension without any other symptoms being present.

The more circumscribed swelling and depression in the neighbourhood above and behind the tympanum, often indicates at the commencement only severe participation of the cavity of the tympanum, of the antrum and mastoid. These affections may be recovered from without operation. When the posterior or posterior and upper wall of the auditory canal is changed so that the lumen is contracted to a mere slit, it is to be taken as a sign of grave disease of the antrum and mastoid. In chronic suppuration, the diagnostic value of depression and swelling of the posterior and upper part of the auditory canal is much greater still. In cases with a bad outlook, it is frequently the only visible sign of a serious complication.

Swelling, redness and tenderness on pressure may appear at any stage of the affection, but they do not by any means indicate the presence of a purulent disease of bone that cannot become absorbed. They show that the interior of the bone is implicated in the disease of the middle ear with hyperæmia and œdema of the bone coverings, and serous effusion into the cavities. If the conditions are favourable these symptoms generally subside quickly. Subperiosteal suppurations also occasionally become absorbed. When the periostitis of the mastoid returns again after it has once disappeared however, or if it persists in spite of appropriate treatment, we must look on it as a sign of an inflammatory process in the mastoid in which spontaneous recovery is out of the question. In chronic inflammations of the middle ear, periostitis of the mastoid process is always a certain indication of purulent disease in the interior of the bone that will not get well spontaneously, and is an absolute indication for operation. Whilst phlegmonous periostitis would appear to be an affection that threatens great danger, as a matter of fact, the danger to life is far less than with suppuration in the interior without external indications of it, where a very hard bony layer prevents the pus escaping outwardly and forces it inwards.

As soon as suppuration in the mastoid is diagnosed, no time should be lost in waiting, considering the disastrous consequences of the pus being driven into the deeper parts.

Before the bony surface of the mastoid shows any marked changes, the pus finds its way out in some places. It not infrequently breaks out from the large cells at the base of the process, and leads to phlegmonous inflammation of the soft

parts. The bursting through of pus on the median surface of the mastoid below the lateral muscles of the neck is, at first, unobserved and leads to a firm, deep-reaching phlegmonous infiltration in the neck below the bone, when the mastoid process is sclerosed and the pus is forced into the posterior fossa of the skull, and spreads into the sulcus sigmoideus, it sometimes lies near the surface at the posterior border of the mastoid, where the bone covering it is frequently very thin and firm, this cause easily sets up otitis and peritonsillitis behind the process which may, as far as external appearances go, be quite intact.

In suppurations of the mastoid, one-sided headache is an important and early symptom, sometimes it is the only one. In general the pains in the head are the most severe when there is a thick layer of granulation in the antrum or mastoid and suppuration has taken place. It cannot be sufficiently emphasised that just those cases in which all symptoms are absent, except the headache, are to be looked upon as the most serious, and where the question as to operation has to be decided at once.

When there is much fever in adults or grown-up children, the case is generally one of serious infection, or one of not uncomplicated suppuration of the antrum and mastoid.

Damage to the power of hearing is a necessary accompaniment to acute inflammation of the middle ear. When, however, the loss of hearing continues after the affection has subsided, it is either because the labyrinth has become implicated, or that the swelling in the Eustachian has not subsided. When the swelling of the mucous membrane of the Eustachian tube has not subsided after some weeks, the cause is generally some collection in the antrum and mastoid.

Paralysis of the facial nerve in acute inflammation of the middle ear is of no value as regards a diagnosis of suppuration. Paralysis coming on late may rather awaken a suspicion of suppuration in the mastoid. In chronic suppurations, on the other hand, the onset of paralysis of the facial nerve is of much more diagnostic value as regards the presence of serious disease of the bones of the mastoid process.

### "SCARLET FEVER FROM COWS."

By G. DE GORREQUER GRIFFITH,

Physician to the Hospital for Women and Children, Westminster.

UNDER the above heading, in your number of November 10th, 1909, is the following:—

"The London County Council have issued a report by their Medical Officer submitting a report by Dr. W. H. Hamer and Dr. T. Henry Jones on an outbreak of scarlet fever last June in London and Surrey, and a bacteriological report by Dr. Mervyn Gordon.

"According to Sir Shirley Murphy's report, the outbreak affected upwards of 400 persons, who consumed milk obtained from a particular milk company. He discusses the two hypotheses of human or bovine origin for the fever. The former hypothesis is dismissed, as careful inquiry failed to yield any evidence of a human source of infection.

"On the question of bovine infection, the report says:—'Under similar circumstances Sir William Power, in 1882, when investigating an outbreak of scarlet fever in certain London districts, made the suggestion that inasmuch as "there is one sort of

relation between scarlatina and accidents of the puerperal state, another sort of relation becomes comparatively easy of belief," in fact, that "if scarlatina in man have other animal source than human source, it may be that one such source is the cow that has recently calved, a cow either not at all ill (except for her parturition), or not so obviously ill as to prevent her milk being used for human consumption." The suggestion thus tentatively made in 1882 at once assumed large importance upon the demonstration by Sir William Power, in 1885, of the bovine origin of scarlet fever occurring in persons consuming milk from a Hendon farm, the cows at which were affected with an eruption of the teats and udder. A similar development of scarlet fever in man, associated with the consumption of the milk of similarly affected newly-calved cows, has been observed in a number of instances since that date. In London, in 1892, and again in 1894 and in 1902, considerable prevalences of scarlet fever due to infected milk were strongly suspected to have been originally of bovine origin. In the present instance a like possibility was necessarily entertained, and it has been found possible by study of the farm operations, in minute detail, to show that just at the time when the milk first began to show infectious property, there was added to it the milk of three recently calved cows, the calf of one of which had died after being suckled by the cow for four or five days. These circumstances, together with the fact that the three cows mentioned, and other cows at the farm, showed at the time of the inquiry appearances upon their teats and udders suggestive of Hendon disease, render it probable that a morbid condition of the cow was responsible for the subsequent human illness.'"

It would seem that scarlet fever may be originated *de novo* at the puerperal period, or, rather, I would say, that symptoms identical with scarlet fever, and not to be differentiated therefrom, may declare themselves.

These latter are hardly originated from scarlet fever, if we accept that ailment as contracted from a previously existing case, or something, or someone that has been in contact with one. This we might call true scarlet fever.

Years ago, Dr. Barnes and Dr. Braxton Hicks wrote about the facility with which puerperal patients became the subjects of scarlet fever, and it was considered the *bête noir* of midwifery.

In 1875, in a paper which I read at the Obstetrical Society, I showed that many cases were not scarlet fever at all, *i.e.*, that affection contracted from a previously existing case of scarlet fever or something infected by that disease, but were the outward and visible signs of the inward and invisible poison generated by or in the patient from something in herself, or from a poison other than scarlet fever, to which the patient was subjected at the parturient time, or previous to it, that the symptoms were those of blood-poisoning, or as is now said—toxæmia.

Sir James Paget noted that after some of his operations the patients were attacked with scarlet fever, and I wrote to him and pointed out that the symptoms—exactly like those of scarlet fever—were not scarlet fever at all, but evidence of—to use the present-day expression—sepsis, attacking the wounds; and Sir James, to whom I was personally known, courteously thanked me.

Does it not seem likely that the cows in the

cases referred to in the extract at the head of this note may have been the subjects of puerperal septicæmia, and that the secretion of those cows, when imbibed by the human being, and poisoning that person, produced those symptoms which we are in the habit of calling scarlet fever?

It would be of great interest to me as bearing on this question to know the veterinary surgeon's report on the local and general conditions of the puerperal cows, just as if they were human animals, that is, the general conditions existing at the same time as the eruption on the teats and udders appeared. If the human scarlet fever have a particular germ, it would likewise be of interest to know if that germ were found in the milk or in the blood of the cow, or in the teats and udder eruption; and also if the germ had been found in the calf which died?

In a future article, I will mention the puerperal case which occurred in 1875 that first made me see, that, at least many of the cases of "puerperal scarlet fever" were not that affection at all, but were, in reality cases of puerperal septicæmia, either autogenetic or heterogenetic.

Dr. David Walsh some years ago dealt with the above and other symptomatic rashes, which he regarded as the result of the excretion or attempted excretion of an irritant by the skin. In the particular case of a "scarlatinal" rash connected with milk, the specific irritant might well be a toxin elaborated either in the milk or in the alimentary canal of the patient. The minutely punctate redness of the eruption at its onset certainly suggest a general inflammatory resistance of cutaneous glands. If we are to connect the scarlatinal rash in this instance with milk as the infecting agent, it seems impossible to avoid the conclusion that the excretory function of the skin is involved therein. Much the same line of reasoning applies to the "scarlatinal" rash following surgical operations. Some drugs, such as copaiba, may act similarly. (a) In all cases where the skin is affected symptomatically, Dr. Walsh points out that other excretory organs may be, and usually are, more or less affected.

## OPERATING THEATRES.

### GUY'S HOSPITAL.

**OPERATION ON BADLY-UNITED FRACTURE.**—MR. ARBUTHNOT LANE operated on a woman, æt. 45, who had suffered from badly-united fracture of the neck of the left femur, which she had sustained nine months ago. She had been confined to bed since the injury, and had been unable to bear the slightest weight on the damaged limb. He made a long vertical incision over the trochanter and exposed the trochanter and the front of the hip-joint; he carefully defined the anterior ligament; this he divided vertically, reflecting its segments inwards and outwards, exposing the head of the bone in the acetabular cavity and the upper end of the neck, which was displaced upwards, backwards and outwards. He rendered the outer surface of the head and the stump of the neck raw by means of a chisel and in a similar way he cut off the extremity of the displaced neck; then by the exercise of considerable traction on the leg in a position of marked adduction, assisted by the use of powerful forceps and levers, he was able to bring the stump of the neck into apposition with the head and the portion of the neck continuous with it. He retained these fragments immovable in their position by means of two long screws, which he drove upwards

and inwards through the base of the great trochanter, the neck of the femur, and head. The divided ends of the ilio-femoral ligament were sutured carefully together. The patient was then placed in a splint. Mr. Lane said that it was unfortunate that surgeons did not treat these cases more effectually at the time of injury, since the primary treatment of these conditions by operation is comparatively easy, while the later treatment is usually exceedingly difficult, and may require, in order to carry it out, perhaps more skill than is possessed by every surgeon. It is unfortunate, he thought, that surgeons still adhere to the ridiculous fashion of fixing the foot vertically by the employment of the vertical foot-piece; by the use of such a foot-piece a proper union of the fragments of such a fracture as the one just seen is rendered impossible. He called attention to this many years ago in a paper entitled "Fallacy of the Vertical Foot-Piece" (*British Medical Journal*, 1894). He pointed out that the screws were what are called Wood's screws amongst carpenters, and are those in common use; the gauge employed was about nine inches. Except in this variety of fracture he only employed short screws, together with a rigid or flexible steel plate, the character of the latter varying with the form of the bone and the functions required of the plate. He used screws in three gauges; these are threaded up to the head. The gauges are 3, 5, and 7. Those in the 3 gauge are for the bones of infants, and are of three-eighths and half an inch in length; those in the 5 and 7 gauge are one-half and five-eighths of an inch in length. This length is sufficient to traverse the thick compact tissue, and they are sufficiently strong to secure a plate firmly even when exposed to great strain. By using only the proximal compact tissue the surgeon is relieved of the trouble of perforating both layers of the compact tissue and of the difficulty of finding the hole which he had made in the distal compact tissue when driving in the screw. No security is lost by the use of the specially threaded screw, since in the ordinary screw only the distal compact tissue engages and secures the thread, the proximal compact tissue exerting no retaining influence on the smooth barrel. By the use of screws in three gauges it is only necessary to have three drills, so reducing the number of these instruments required. The splint he finds most useful for the treatment of fractures of the femur is one devised by his house surgeon, Mr. Chapple, and made by Messrs. Down Brothers. It presents very many advantages over the double Thomas's splint, which was the one he had employed previously—facility of application, comfort in its use from the point of view of the patient, and capacity to flex the knee-joints at any time, so obviating the stiffness of the knee which so frequently complicates fractures of the femur.

The patient made an uninterrupted recovery

### OPERATION FOR PROGRESSIVE CHRONIC TUBERCULOSIS.

—The same surgeon operated on a man, æt. 24, who was suffering from a discharging psoas abscess with tuberculous lesions elsewhere. The patient had been in the hospital some time, and in spite of treatment by absolute rest, tuberculin, etc., it became apparent that the case could only end unsatisfactorily, and at no distant date. Mr. Lane pointed out that this patient illustrated in a very typical manner the views that he held, namely, that the very large proportion of these tuberculous patients suffered from intestinal stasis, and consequent auto-intoxication. This is especially true in cases of tuberculous disease of the joints and glands. He considered that the auto-intoxication reduces the resisting power of the individual to the entry of the tubercle which is present everywhere. Arguing on these lines, he was of opinion that the diverting of the faecal stream from the large bowel into the rectum might so improve the patient's resisting power to tubercle by relieving him of his intestinal auto-intoxication as to enable him to meet and overcome his disease. This particular patient presented the symptoms of intestinal auto-intoxication in a most characteristic manner. He had explained to the patient the views he held on the subject, and the latter very willingly accepted the treatment suggested.

(a) "Excretory Irritations." By D. Walsh, M.D. London: Baillière Tindall and Cox. 1897.

He opened the abdomen and exposed the large intestine, which showed in a very marked degree the mechanical conditions which Mr. Lane has so frequently described as characteristic of intestinal stasis. He divided the ileum about four inches from its termination, including each of its proximal and distal extremities, by means of an encircling catgut ligature and embedding the resulting stumps securely by means of purse-string sutures; he then united the proximal end of the ileum to the lower limit of the sigmoid by lateral anastomosis. The interval between the meso-sigmoid and the mesentery was obliterated by an encircling suture which perforated the peritoneum at intervals. An œsophageal tube was then passed through the anus, rectum, the aperture of anastomosis and the ileum for a distance of a foot, the open aperture of the tube being sutured to the margin of the anus. This use of the tube is of greatest service, Mr. Lane said, in these cases, since it carries away at once the gaseous or fluid contents of the small intestine which may otherwise hesitate to pass through the newly-formed anastomosis, and in this way renders the patient much more comfortable than he would otherwise be. The tube is kept in position for five or six days, when it is removed. The operation was rendered somewhat difficult by the presence of a large iliac abscess on the left side, which had undermined the skin for some distance around.

The patient made an uninterrupted recovery, and expressed himself as being delighted with the result of the operation. His appetite and general condition are much improved. Too short an interval has elapsed, Mr. Lane remarked, to enable one to speak dogmatically of the ultimate result in this particular case. In a somewhat similar case of a child, in which the same operation was performed in the Hospital for Sick Children, the improvement that has followed upon operation is most marked. Should this operation prove successful in a class of case in which ordinary treatment would appear to offer little or no result, a very large field would be opened up to the surgeon. It is very possible that other diseases, such as true rheumatoid arthritis, which would appear to arise in the presence of a severe degree of intestinal stasis, may be efficiently dealt with in the same manner. It is only by proving or disproving these views by putting them to the test of operation that we can arrive at any definite conclusions.

## TRANSACTIONS OF SOCIETIES.

### THE ROYAL SOCIETY OF MEDICINE.

#### CLINICAL SECTION.

MEETING HELD FRIDAY, DECEMBER 10TH, 1909.

The President, A. PEARCE GOULD, Esq., M.S., F.R.C.S., in the Chair.

MR. JOHN R. LUNN showed a  
CASE OF ACROMEGALY.

The patient was a woman, æt. 52, and was a typical example of the disease in an early stage. The tongue and lower lip were enlarged, and the lower jaw protruded. The nasal cartilages were thickened. The skin and hair were coarse, and the hands short, broad and square-looking. Intelligence was normal.

Dr. ROBERT MILNE showed a case of  
ACROMEGALIC GIGANTISM.

The patient, a boy, æt. 19, was at the age of 9 a little under average height, but otherwise quite normal. At 13 he began to grow very rapidly, and suffered from pains in the legs and back and general weakness. At 15 he was 6ft. high, and at 16, 6ft. 4in. In November, 1909, he was 6ft. 11in. His hands had increased out of proportion to the rest of the body, and measured 9½ inches long. His mental powers were above the average, and he was cheerful and sociable. A skiagram showed an enlargement of the pituitary body. Others of his family were of uncommon height.

Dr. ROBERT MILNE also showed

#### TWO CASES OF ACHONDROPLASIA.

Both were typical examples of the disease. He considered that the condition arose in arrested development of the long bones from the 3rd to 6th month of fetal life, the proximal segments being relatively more affected than the distal. The middle of the body was 2½in. above the umbilicus zone, and 3in. above it in the other.

Dr. McMULLEN showed a

#### CASE OF ADIPOSIS DOLOROSA.

The patient was a woman, æt. 62. The condition had started as a localised and circumscribed lipoma of one arm, five years ago, and had spread rapidly. The changes were preceded by and associated with pain along the nerve trunks, and areas of hyperæsthesia of the skin. The upper arms, back, left buttock, and sternal region were affected. Thyroid extract had been administered with moderate improvement.

Dr. GOSSAGE referred to a similar case, which had not benefited at all by thyroid. Sometimes mental deficiency was present in such cases.

Mr. WARREN LOWE said that he had noted that in cases of symmetrical lipomata an area of hyperæsthesia, or perhaps actual pain foreshadowed their formation.

Dr. LEONARD WILLIAMS believed that the condition was due to errors of internal secretion, and mentioned a slow pulse, dry skin, and subnormal temperature as evidence of constitutional disturbance. It was allied to myxœdema, and only occurred in women at the menopause, and was probably due to a want of coincident decline in the activity of the ovaries and thyroid. Possibly other internal secretions were also defective.

Dr. POYNTON said that in his experience patients who required thyroid took it readily, whilst those in whom it was not beneficial were easily overdosed.

Sir DYCE DUCKWORTH thought that, under the name of Dercum's disease, several different conditions associated with the formation of fatty tumours had been described. The course of the disease was often modified by thyroid treatment.

Dr. GALLOWAY thought that several cases described under this title had been improperly so named. In one type serious vasomotor disturbance and destruction of skin occurred. He had made a post-mortem examination in such a case, and found marked degeneration of the muscles all over the body.

Dr. PARKES WEBER said that the peculiarity in these cases was the absence of diffuse lipomata. Such occurred nearly always in women, whilst diffuse lipomata were nearly always found in men.

Dr. McMULLEN, in reply, said that the pulse-rate had never been below 80. The mental condition was active. The menopause had occurred 18 years ago, but the lipomata only appeared five years ago.

Dr. HERRINGHAM showed a

#### CASE OF RHEUMATOID ARTHRITIS WITH ALBUMINURIA, AND WITH GREAT ENLARGEMENT OF THE LIVER.

The boy, æt. 15, was a typical and severe case of the disease. In 1907 the axillary glands were enlarged, and also the spleen, slightly, but at that time there was neither albuminuria nor an enlarged liver. The liver now reached to the iliac crest, and was smooth, hard and painless. The urine contained a large quantity of albumin. No amyloid reaction had been obtained in urinary casts, which were hyaline, granular, and epithelial.

Dr. POYNTON said that Dr. Beattie had found definite lardaceous degeneration of the liver in protracted cases of rheumatism and anæmia. In Dr. Still's cases the liver sometimes showed slight fatty enlargement.

Dr. PARKES WEBER said that liver enlargement in children was almost always due to fatty change.

Sir DYCE DUCKWORTH said that from the physical examination, he thought that the condition was that of amyloid disease, and suggested the administration of large doses of iodide of potassium.

Dr. H. D. ROLLESTON thought that the absence of lardaceous reaction in the casts was not sufficient to

eliminate the diagnosis of lardaceous disease. Renal disease in rheumatoid arthritis was well known.

Dr. HERRINGHAM, in reply, said that the renal disease which occurred in rheumatoid arthritis was a true nephritis, and not a degeneration.

Mr. ALBERT CARLESS showed a patient who had been operated upon for

IMPACTION OF A LARGE CALCULUS IN THE LOWER END OF THE RIGHT URETER.

The patient was a man, *æt.* 29, who had been admitted to hospital for supposed stone in the kidney. Radiographic examination showed a large shadow, dense and ovoid, on the right side of the pelvis and just below the brim. A median laparotomy was performed for exploratory purposes, and the stone removed later from a lateral incision, after the peritoneum had been turned forward. The ureter was dilated to the size of a dilated small intestine, and filled with pus. The stone weighed 803 grains, and was composed of uric acid. The patient had recovered, with a ventral hernia.

Mr. THOMSON WALKER said that 816 grains was the heaviest weight for a ureteral calculus that he could find in the literature. In such large stones the kidney was usually destroyed. The operation usually performed was extra-peritoneal, and the mortality was very low.

Mr. DREW recalled three cases in which he had removed stones from the ureter, and in all three ureteral strictures arose.

The PRESIDENT said he had removed a large stone from the ureter, but one which was smooth, like that exhibited, and no stenosis had occurred.

Mr. W. G. SPENCER showed a patient, illustrating TREPHINING FOR GENERAL EPILEPSY.

The fits had started when the boy was *æt.* 14. A shallow depression had existed on each parietal bone, midway between the bregma and the parietal eminence. The fits, which were without localising significance, persisted until 1906, when he was 20 years old, and backward and uneducated. The patient was then trephined, the depression bone being removed. Only one slight fit had occurred during the three years since the operation, and he was making progress with a tutor.

Dr. F. J. POYNTON showed TWO CASES OF CONGENITAL ŒDEMA, WITH CARDIAC DEFECT IN MOTHER AND DAUGHTER.

The mother, at  $\frac{1}{2}$  years of age, had been noted as having congenital Œdema and a cardiac bruit. The Œdema had slowly increased. The heart showed an enlarged area with forcible impulse, and a mitral systolic murmur with accentuated pulmonary second sound could be heard. The daughter was *æt.* 7, and the youngest of seven children, and the only one with this condition. The murmur was also systolic in time, and heard at both base and apex.

Mr. J. W. THOMSON WALKER showed a man, *æt.* 55, on whom resection of the bladder for malignant disease had been performed. By cystoscopy a large growth had been seen projecting into the bladder, extending from the outer tip of the left ureter upwards on the left lateral wall almost to the apex. No sign of infiltration was seen beyond the mass, nor of secondary intra-vesical growths. Recovery after resection had been uneventful.

Mr. CHARTERS SYMONDS showed a man, *æt.* 65, the subject of excavating rodent ulcer of the face, under treatment by radium. The condition had been present for over 27 years, and many operations had been done. X-rays had not proved successful. The treatment was having good effects, and it was hoped that the case would be shown again later.

Mr. ARCHIBALD SMITH and Mr. JAMES McDONAGH showed a case of pachydermatocoele. The swelling was tripartite and situated in the scalp midway between the left ear and occipital protuberance. The occipital nerve, enlarged and tender, could be felt between the middle and posterior parts of the swelling. Sections prepared from a fragment removed under local anaesthesia, were exhibited.

Mr. FREDERICK EVE showed a case of arterio-venous aneurysm with exophthalmos, following an injury to the head. J. N., a man, *æt.* 30, had fallen on the

back of his head from the foot-board of a rapidly moving motor-bus. Next day he had headache and double vision, and later the left eyeball began to swell and cause pain. When seen three weeks after, there were proptosis, ophthalmoplegia externa, and ptosis of the left side. The pupil reacted and vision was good. Pulsation of the eyeball could be felt, and a loud systolic bruit could be heard over the globe, the supra-orbital region and temple. These ceased on compressing the left carotid artery. When exhibited, the proptosis was the same, but the pulsation had diminished. The disc had become swollen.

Mr. FREDERICK EVE also showed a case of partial luxation of the odontoid process. It was that of a girl, *æt.* 17. The condition followed an injury in March, 1908. In October, 1908, extension was applied for a month, and she was discharged improved, with a jacket and head support. Flexion of the neck was good, extension fair, but rotation very limited. Radiogram showed considerable backward displacement of the odontoid process.

Mr. FREDERICK EVE also showed a case of transverse fracture of both patellæ, with much separation of the fragments, treated by operation. It was that of a man, *æt.* 41. The fragments had been wired after dissecting out the fibrous bond of union, and freely dividing the insertions of the two quadriceps. Now, four years later, he could do his work as a lighterman.

Mr. H. T. PATERSON showed a gumma of the breast simulating malignant disease. The breast had been removed from a female, *æt.* 36, because it was thought to be the seat of sarcoma, and such was the report of the pathologist on a piece removed at the time of the operation. Further investigation demonstrated its inflammatory nature.

Mr. JOHN D. MALCOLM showed a woman, *æt.* 68, for whom he had performed cholecyst-duodenostomy for acute emaciation. A biliary fistula had been left after operation for jaundice, and this was followed by rapid emaciation. As a last resort, the abdomen was re-opened and communication made between the fundus of the gall-bladder and the duodenum. The patient's nutrition then steadily improved.

Mr. ALBERT CARLESS said he could recall a similar case, and also another in which, on the other hand, although all the bile flowed externally, no emaciation resulted. There was some other factor besides merely loss of bile, which determined the wasting.

Mr. PARKES WEBER showed a case of a woman, illustrating a successful result following Talma's operation for hepatic cirrhosis, and also a case of Van Recklinghausen's disease in a woman, *æt.* 45.

Mr. BALLANCE showed a man, *æt.* 29, illustrating recovery after trephining for fracture of the basis cranii.

Mr. Sargent also showed a case.

## ROYAL ACADEMY OF MEDICINE IN IRELAND.

### SECTION OF PATHOLOGY.

MEETING HELD FRIDAY, NOVEMBER 12TH, 1909.

The President, A. H. BENSON, F.R.C.S.I., in the Chair.

### PRESIDENT'S ADDRESS.

THE PRESIDENT delivered an address "Concerning Trachoma," which we hope to print in our next issue.

Dr. DRURY read notes of a case of HYPERTROPHIC CIRRHOSIS WITH ALCOHOLIC PARALYSIS, which appeared in our issue for December 1st.

### PERFORATED GASTRIC ULCER.

Dr. J. B. COLEMAN, C.M.G., exhibited viscera of a woman, *æt.* 34, who died from symptoms of gangrene of the lungs, consecutive to perforated gastric ulcer. The autopsy revealed a small ulcer, which had perforated, on the posterior wall of the stomach, two inches from the fundus. A sinuous track from the perforated ulcer led, by a perforation in the diaphragm, into an abscess cavity, one and a



half inches in diameter, between the diaphragm and the base of the left lung. The lower lobe of the left lung contained several abscesses and gangrenous areas.

#### STERCORAL ULCERS IN SMALL INTESTINE.

Dr. ROBERT ROWLETTE showed a specimen of above. The organ had been obtained, post-mortem, from a woman who had suffered from diarrhoea for seven years. For the last two years she had not passed a solid motion. The lower three feet of the ileum was crowded with small ulcers, which had destroyed the greater part of the mucous membrane of the region. The ulcers were clean cut, reaching to the muscular layer, and some of them contained sloughs. In the cæcum was similar ulceration of less extent. In the ascending colon, close to the ileo-cæcal valve, was a stricture, whose lumen did not admit a lead pencil. The stricture was found to be due to scirrhus carcinoma. The condition of ulceration Dr. Rowlette believed to be identical with that occurring in the large intestine as the result of stasis of the contents. Of the four theories put forward to explain the ulceration—(1) irritation by scybala, (2) obstruction of the vascular supply by stretching, (3) bacterial invasion, (4) toxic solution, he inclined to accept the last.

#### OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.

MEETING HELD IN THE ROOMS OF THE MEDICAL SOCIETY OF LONDON, DECEMBER 9TH, 1909.

Mr. W. H. JESSOP, F.R.C.S., Vice-President, in the Chair.

Mr. S. STEPHENSON showed a case of tubercle of the choroid, shown originally on October 17th, 1907.

Mr. Bishop Harman showed three cases: (1) Abnormal congenital pigmentation of one eye. (2) Retinitis nœvus. (3) The diaphragm test. Finished models of the instrument and its accessories.

Dr. Rayner D. Batten showed an orbital frame for eyeglasses, and its adaptation for a ptosis prop.

Mr. A. H. Payan Dawney, opacities of cornea of unusual character.

Mr. Hepburn exhibited a case of hæmorrhages of the macula.

#### DEATH OF THE LATE PRESIDENT, MR. MARCUS GUNN.

Before the papers of the evening were read, the Chairman alluded in very sympathetic terms to the recent demise of last year's President, Mr. R. Marcus Gunn. He alluded to the large number of contributions which the late distinguished member had contributed, all marked by great accuracy and care in observation. Mr. Jessop also dwelt affectionately on Mr. Gunn's personal qualities, and his faculty of endearing himself to all with whom he was brought in contact. It was resolved to send a letter of condolence to Mrs. Gunn and family.

Mr. DOYNE read a paper, describing a form of CONJUNCTIVITIS

in which the Meibomian glands were affected with staphylococcus aureus. This, he described, as giving rise to definite acute attacks, especially after exposure of the eyes. He also pointed out that many cases described as chronic conjunctivitis were due to this cause, as well as many other cases of marginal blepharitis.

Mr. Doyne showed a member of a fresh family suffering from guttate choroiditis, which he described some years ago, and gave a brief description of the condition. He also read a brief note on a condition that he described as myopic degeneration of the lens, and had pointed out the condition to the Society in 1886, when he showed a patient suffering from this form of nuclear degeneration.

He also read notes of a form of iritis which he described as guttate iritis, occurring in elderly and gouty persons. It presented the appearance of one or more warts at the pupillary margin of the iris, which came on without any noticeable inflammatory appearances and sometimes disappeared without giving rise to any inflammation. At other times inflammatory

symptoms appeared and adhesions to the lens took place.

Mr. HARMAN, in discussing the first paper, said that seven years ago he made bacterial cultures from the normal healthy eyes of school children, by passing a platinum loop along the mouths of the Meibomian glands, and in every case he got enormous numbers of staphylococcus aureus and albus.

Mr. DOYNE, in reply, asked members to look out for such cases and endeavour to ascertain the exciting cause, but for five days nothing but water should be used in the eyes.

Mr. Doyne's other papers were discussed by Mr. Nettleship, Mr. Harrison Butler, and Mr. J. E. Adams.

Mr. M. S. MAYOU read a communication entitled

#### A CONGENITAL SARCOMA OF THE ORBIT.

He pointed out that the interest in this case lay partly in its extreme rarity and partly because of its clinical resemblance to the proliferating cysts.

CASE.—A. P., male, æt. 12 days, was admitted to the Central London Ophthalmic Hospital on March 13th, 1908. No eye had been seen since birth on the left side. The patient was a strong, healthy infant, and presented no other congenital abnormalities. The right eye was to all appearance normal. Filling the left orbit and protruding from between the lids, which could not be closed, was a red, slightly oedematous mass. It was irregular on the surface, and covered by the epithelium of the conjunctiva, except where it was exposed in the palpebral aperture, where it had started to ulcerate. There was no enlargement of the preauricular gland, and no eye could be seen. On March 13th the orbital contents were eviscerated, leaving the eyelids in position. The child made a good recovery, the wound granulating and healing over with epithelium.

On June 16th, 1908, the child returned to the hospital with a large recurrent mass, filling the entire orbit and bulging forward the upper lid and protruding between them. Complete evisceration of the orbit was performed, the child making a good recovery. After the operation the patient attended the hospital for four weeks, but since then has been lost sight of.

The contents of the orbit submitted for examination were hardened in formol. The eye, which was embedded in the upper part of the tumour, had been cut open and the sclerotic divided posteriorly in several places. It appeared about the normal size, the cornea, anterior chamber, iris, ciliary body and lens being normal. The condition of the posterior part of the globe could not be drawn out, but there was no evidence of any cystic protrusion therefrom. No definite orbital structure could be recognised, the whole being involved in the tumour. It was composed of medium-sized spindle cells. The walls of the vessels within the tumour were composed for the most part of its cells. Hæmorrhages had taken place into the growth in many situations. The recurrent tumour, examined microscopically, exhibited the same characteristics as the primary tumour, except that the hæmorrhages were not so numerous.

The typical microscopical appearances, together with the recurrence of the disease, led him to believe it to be a spindle-celled sarcoma of the orbit, developing during intra-uterine life. He had been able to discover the records of two similar cases which exhibited much the same characteristics.

Messrs. A. P. L. WELLS and M. S. MAYOU read a paper on

#### LYMPHOSARCOMA OF THE LACRYMAL GLAND.

They pointed out the want of proper classification of tumours of the lacrimal gland. They divided them into those derived from the epithelial, the connective, and the lymphoid tissues. The case which they brought before the Society was one of the latter type.

CASE.—M. A., female, æt. 66, was admitted to the Central London Ophthalmic Hospital on January 14th, 1909. She was a strong, healthy woman, no anæmia, no glandular enlargement. There was nothing in her previous history of note. She complained of a swelling which she had noticed for a considerable time at the upper and outer part of the left orbit in the situation of the orbital portion of the lacrimal gland.

The surface of the swelling was somewhat irregular, and about the size of a large walnut. It was soft, almost fluctuating, rounded in outline, and moderately freely movable.

From January to April whilst under observation it gradually increased in size, and on admission into the hospital on April 8th there was, in addition to the above symptoms, displacement of the eye downwards, and the tumour seemed to have become slightly attached to the margin of the orbit, which seemed thickened. There was no enlargement of the salivary or lymphatic glands, and no signs of dissemination.

On April 9th an incision was made over the tumour, which was found to be encapsuled, except in one situation, where it was ruptured. After removal it was seen to be about the size of a walnut, and surrounded by a capsule, which was evidently formed from the original capsule of the gland. This was composed of fibrous tissue, and was much thicker in some positions than in others. In some situations it was much infiltrated by the cells of the growth, whilst in one the tumour had penetrated it. The tumour consisted of round cells about the size and shape of an ordinary lymphocyte, and showed no signs of degeneration, although at some places the cells were more darkly stained and packed closer together than others. Mitosis was not marked in the cells. The vessels in the tumour were of two kinds. Some, which were evidently new, were composed of a single layer of endothelium, or, in some situations, of the cells of the tumour itself; the others, which were generally situated in the remains of the trabeculae of the gland, and were probably the original vessels supplying it, had normal coats, which were somewhat thickened.

In the literature they had been able to find eight similar cases which exhibited much the same characteristics. The points about the tumours were the late age at which they occurred—all the patients being over 38; their slowness of growth—3 to 4 years, and the absence of glandular enlargement. They also pointed out that these tumours should be differentiated from other orbital sarcoma invading the gland, and from lymphoid growths such as are found in chloroma and lymphadenoma.

Mr. ORMOND discussed the case.

#### EDINBURGH MEDICO-CHIRURGICAL SOCIETY.

MEETING HELD WEDNESDAY, DECEMBER 1ST, 1909.

The President, Dr. BYROM BRAMWELL, in the Chair.

Dr. EDWIN BRAMWELL showed specimens illustrative of tumour of the brain.

Dr. G. A. Gilson showed microscopic slides showing ganglion cells and nerve fibres in the auriculo-ventricular bundle.

Dr. Byrom Bramwell showed a case of pre-ataxic tabes, with gastric and intestinal crises, in which the operation for appendicitis was performed.

Mr. A. A. Scot Skirving showed patients, illustrating certain defects of memory after operation for middle meningeal hæmorrhage.

Dr. F. D. Boyd showed a case of chronic Bright's disease, illustrating the benefit of a salt free diet in the relief of œdema.

Mr. Alexis Thomson showed a boy, æt. 11, in whom on account of a periosteal sarcoma of the right humerus, the middle third of the shaft was resected and a portion of the fibula inserted in its place. This more conservative operation had been preferred to amputation at the shoulder, or interoscapula thoracic disarticulation on account of the bad results, as regards recurrence, which followed these drastic measures, it was hoped by X-raying to delay, and possibly avert, the recurrence of the growth which would probably take place.

Dr. JAMES RITCHIE, Superintendent of the College of Physicians laboratory, gave a demonstration of THE WASSERMAN REACTION.

He showed tubes illustrating complement duration,

which was the factor underlying the Wasserman test. Normal rabbit serum did not lyse ox corpuscles, but the serum of a rabbit immunised against ox corpuscles did so. This lytic power of immune serum depended on two substances, one thermostable—the complement; one thermolabile, the immune body. Heated immune serum therefore lost the power of lysing corpuscles, but gained it when complement was added. When certain substances were mixed—e.g., syphilitic serum and syphilitic antigens, or syphilitic serum and extract of normal serum, or albumen and the inactivated serum of an animal which had been immunised against the albumen—the mixture had a great affinity for complement, and fixed it, or entangled it in some way. This fixing or duration of the complement was tested for by adding the mixture of antigens, suspected virus, and complement to inactivated hæmolytic serum and ox corpuscles. If the complement had been fixed, no hæmolysis occurred, if it had not been fixed, hæmolyses did occur. The importance of measuring the doses of the various substances used, and of employing the necessary controls, was explained; the test was regarded as a very reliable one, though its exact nature was not yet settled.

Dr. DAWSON TURNER read a paper on—

#### 'THE EFFECTS AND USE OF RADIUM.'

He had had at his disposal for the last few years 45 milligrams of radium. The specimens were contained in sealed glass tubes, and in an aluminium box with a lid only 1.5th millimetre thick, therefore practically transparent to the radiations. He had not made use of the *boîtes radifères* employed in Paris; the amount of radium on them was spread out in so thin a layer that he doubted their efficacy except for the most superficial conditions. Radium rays had two chief actions:—(1) A specific effect on rodent ulcers, cancer, angioma, keloid, cicatrices, and fibrous contractions. (2) An action producing inflammation and destruction similar to that of caustics and heat. The undue action of radium on a rodent ulcer is shown by filling up of its surface, drawing in of the edges, and finally the growth over it of transparent skin. If radium is applied to healthy skin a tender red spot develops in the course of a day or two, and over this an impetigo-like crust may form. He had not observed any tendency to form the obstinate and painful  $\gamma$ -rays sore. The dose of radium is measured by the product of the strength of the preparation and the length of the exposure, what would be termed electrically the "ampere hours," but these quantities would be modified by screens, the effect of which is to cut off the less penetrating rays and to protect the superficial tissue, for only those rays which are absorbed by the skin can be affected. All the radiation can be cut off by a sufficient screen except the  $\gamma$ -rays, and these are few in number. If a superficial condition is to be attached, use no screen, and give a short exposure; the  $\gamma$ -rays predominate, they are powerful but feebly penetrative. If a subcutaneous condition is to be treated, use an aluminium screen  $\frac{1}{4}$ – $\frac{1}{2}$  mm. thick, or a lead one 1.10th mm. thick, and give a longer exposure, only the  $\beta$  and  $\gamma$ -rays will now be available. If the disease be still deeper, use a lead screen  $\frac{1}{4}$  to 1 mm. thick and give a prolonged exposure, only the hard  $\beta$  and  $\gamma$ -rays will penetrate, and they are relatively few. No after treatment in the way of dressings are necessary. Atrophies are signs of an over-dose. Dr. Turner illustrated his remarks on the properties of radium by showing experimentally the ionisation of the air which the radiations cause, and the consequent discharge of a gold leaf electroscope. He had found it of use in rodent ulcer, angioma, keloid, cicatrices, warts, simple ulcers, malignant growths, and pruritus. He referred in some detail to a series of cases treated. (1) A male, æt. 46, with a rodent ulcer, which yielded to six hours exposure to 5 mg. radium bromide of an activity of 300,000. (2) A rodent ulcer in a male of 50, cured by an exposure of five hours to 10 mg. pure radium bromide, screened only by a thin piece of parchment paper. (3) A large rodent ulcer, measuring  $2\frac{1}{2}$  by  $1\frac{1}{4}$  ins., almost healed by an

exposure of 180 milligram-hours. (4) A port-wine stain on the face of a young woman much improved by an exposure of 510 milligram-hours. (5) A capillary naevus on a baby practically cured by 3.3 milligram-hours. (6) A tumour of the palate, of doubtfully malignant nature, much improved. Other cases were also mentioned, especially of warts, on which radium acts like a charm, and leukoplakia, in which it was decidedly beneficial.

Dr. DINGWALL FORDYCE read a paper on the DIFFERENTIAL DIAGNOSIS AND TREATMENT OF A COMMON FORM OF DYSPEPSIA AND OF EARLY TUBERCULOUS INFECTION IN CHILDREN.

He first alluded to the great difficulty of deciding whether or not in a certain group of cases a tuberculous infection was present. The characteristics of the group of cases were the indefiniteness of the history, the presence of gastro-intestinal symptoms, and the absence of signs. The diagnosis lay between the two following conditions:—A form of chronic dyspepsia associated with pallor, wasting, constipation, and occasionally vomiting. The gastro-digestion is good, but fat is well tolerated. A dose of calomel gives relief, and there is no obvious organic lesion. On the other hand are cases of early tuberculous infection. The symptoms are the same; there may be a history of exposure to infection, and there are no definite physical signs. In these cases the infection is probably glandular, bronchial or abdominal. Probably the chronic indigestion of the first type not infrequently merges itself in tuberculosis. The points on which a diagnosis rest are:—(1) The capacity of digesting fat. (2) The reaction to the tubercular tests. (3) The condition of the urine. (4) The opsonic index. The urinary test referred to was the estimation of the conjugate sulphates, and neither it, nor the opsonic index were further discussed by the speaker on account of their tedious and complicated nature. The criteria on which he relied were the power of digesting fat, and the anti-reaction. He had found that while the tuberculous patient took, and took well, large quantities of fat, in the shape of milk, eggs, butter, and cod-liver oil, in the non-tuberculous cases attempts to give fat simply made the indigestion worse. A positive Pirquet reaction he regarded as definite proof of the tuberculous nature of the case.

In all cases of chronic indigestion the diet should be cut down; rest in bed, calomel, and later strychnine were of value. A good drink of water at bed-time, and baths were also advisable. Thyroid was sometimes useful, and in other cases butter-milk. In tuberculous cases, on the other hand the diet should contain plenty of protein and fat, and tuberculin should be given. Tuberculin was safe in small doses when the temperature is normal; unsafe in large doses and pyrexial cases. Sometimes the treatment has no definite effect. T.R. is preferable to P.T.R., and hypodermic injection much superior to oral administration. The dose varied from 1-10,000th mg. to an infant of nine months to 1-3,000th mg. to a child of 12 years. Injections should be repeated weekly, and the doses increased at long intervals and by very minute amounts. Any diminished vitality after an injection was considered an indication for discontinuance or diminution of the dose of tuberculin.

Dr. Fordyce's paper was discussed by Drs. Fowler, Simpson, Watson, and Boyd.

#### GLASGOW MEDICO-CHIRURGICAL SOCIETY.

MEETING HELD FRIDAY, DECEMBER 10TH, 1909.

The President, PROFESSOR MUIR, in the Chair.

#### EXHIBITION OF CASES AND SPECIMENS.

PROFESSOR MUIR and his assistants showed card specimens, in which were illustrated supra-renal tumours, and the more recent lesions discovered in relation to disease of the marrow of bone.

Dr. Stockman showed photographs which were illustrative of rheumatic arthritis and gout.

Dr. T. K. Dalziel showed an ovarian tumour, from which he had removed 6½ gallons of fluid; and Dr. J. H. Nicoll showed a number of urinary calculi, which had been removed within the past three years.

Dr. G. H. Edington showed the following specimens: Congenital prolapsus uteri, large carcinomatous ovarian tumour, cystic ovary which was removed from a hernial sac, and cancer of cæcum; along with these were illustrated stereo-photographs of various surgical conditions, and in conjunction with Drs. Finlay and Dunn rupture of various vascular structures.

Drs. Carslaw and Dr. Dunn showed specimens and microscopic sections from sporadic cases of ulcerative colitis, along with similar specimens from the Pathological Museum.

Dr. J. S. McKendrick showed polygraph tracings taken in the course of certain affections of the heart.

Dr. S. J. Cameron showed a specimen of twin ectopic pregnancy and a chorion-epithelioma, in which very little hæmorrhage had occurred in the tumour.

Dr. J. Stoddart Barr showed a microscopic preparation and photographs taken from the external auditory meatus of a former resident in Burmah, of *aspergillus nigrans*. Dr. Barr also showed cases illustrating congenital syphilitic disease of the labyrinth, of auditory vertigo, and some of the pathological appearances which were seen in the tympanic membrane and tympanum during the course of, and following, chronic otorrhœa.

Dr. Walker Downie showed some recent cases of radical operation for the cure of empyema of the antrum of Highmore, etc., case of stenosis of the larynx, and a boy recently operated on for the removal of a large thyro-hyoid cyst.

In the Electrical Department, Dr. Tomkinson showed an interesting series of cases which were illustrative of ichthyosis simplex; pityriasis vulva-pilaris; extensive rodent ulcer; tubercular, ulcerative, syphilitic and syphilitic elephantiasis, which were treated by intramuscular injection; cases of lupus; two other cases, namely, extensive favus and tinea tonsurans, which were treated by Sabouraud's method.

In the out-patient operating theatre a series of interesting cases were displayed, the more important of which were excision of elbow-joint, with X-ray photographs showing reproduction of the bones removed; cancer of colon and pylorus, by Dr. J. C. Renton.

Case of splenomegaly with the blood changes, and also a case of acromegaly, shown by Dr. Wm. MacLennan.

Dr. Barclay Ness showed a case of Still's disease in a girl, five years of age, with chronic polyarthritis and enlargement of the lymphatic glands.

Dr. Alex. MacLennan showed four cases which were operated on for cubitus varus, and made special reference to the prevention and treatment of the deformity; in addition, Dr. MacLennan demonstrated a case where a toe-nail was transplanted to the thumb.

Dr. A. B. Sloan showed a case where there was a marked retraction of the heart to the left side, due to fibroid change in the left lung.

Dr. J. H. Nicoll showed a case of congenital hypertrophic stenosis of the pylorus, with specimens and sections in illustration; also several cases of the condition treated by operation.

## CORRESPONDENCE.

FROM OUR SPECIAL CORRESPONDENTS  
ABROAD.

### FRANCE.

Paris, Dec. 12th, 1909.

#### HOT WATER IN GYNÆCOLOGY.

By hot later in gynæcology is meant, water at 120° or 130° F. At this temperature water exercises energetic vaso-constriction of the blood vessels of the uterus; hence its employment as an hæmostatic. Besides, hot water possesses powerful resolutive properties which make it a first-class therapeutic agent in inflammatory affections. It stimulates the local

circulation, favours cellular exchanges, removes the wastes from the organs, and favours the phenomena of diapedesis and phagocytosis.

In gynaecology, its employment is indicated each time the uterus or its appendages are the seat of chronic or subacute inflammation.

It is thus that Prof. Reclus, who recommends and practiced this treatment for several years, never advises a radical operation for an inflammatory affection of these parts, without having previously tried, conscientiously and perseveringly, vaginal irrigations and rectal injections. He always begins the treatment by this method, and it is only when convinced of its failure that he has recourse to an operation.

Frequently this treatment succeeds in the least hopeful cases. Hot water is consequently a marvellous agent, but on the condition that it is employed with method, precision, and perseverance.

Vaginal irrigations, provided they are abundant (four quarts at least) may be sufficient. An injector with a double current should be employed, and furnished with an obturating plate for the protection of the vulva. To one cannula is attached an india-rubber tube conducting the water from the reservoir to the vagina; a similar tube is fixed on the other to return the liquid to a basin or pail. The reservoir or douche should be placed about 18 inches above the horizontal plane on which the patient is lying, and a thermometer fixed in the douche marks the temperature, which should always be maintained at 122° F. By this simple apparatus, found in every chemist's shop, the patient can be treated in bed without difficulty or fatigue.

To these vaginal irrigations it is frequently advisable to associate rectal injections, which reach the back part of the uterus. Prof. Reclus considers even these injections much superior to vaginal irrigation. Unfortunately, they are not always well accepted by the patient.

Where they can be given, these enemas should be administered morning and evening, about a pint at a time, and at the usual temperature of 122° F. When the cannula is introduced, the stop-cock is turned on gradually so as to give time to the intestines to tolerate the liquid. After the operation the patient keeps lying motionless for half an hour, when she may allow it to evacuate. In severe cases the hot-water bag will be placed over the hypogastric region.

Rest and heat, intus and extra, renewed as frequently as possible and applied as long as possible, such is the secret of the treatment.

As there exists, says Prof. Reclus, hardly any uterovarian affection that is not complicated with congestion of the parts, hot water prescribed as above is the first treatment, and if all the patients are not cured, great relief may be obtained in nearly every case.

With hot water and rest, it may be affirmed that any intelligent and decided woman—for the treatment is more or less severe, and sometimes painful—will almost surely get well and recover her former activity.

#### INCOERCIBLE VOMITING OF PREGNANCY.

Incoercible vomiting of pregnancy may be rapidly relieved by 5-drop doses twice a day of a solution of adrenalin (1-1,000), as proved by Prof. Rebaudi; ingestion of supra-renal preparations possess a similar action.

#### ERYSIPELAS.

Chloride of lime, 1 dr.  
Vaseline, 3 oz.

Under the influence of this ointment the temperature falls in one or two days. Complications are also avoided.

#### GERMANY.

Berlin, Dec. 12th, 1909.

#### NEUTRALON.

At the Verein für Innere Medizin, Hr. Erhmann communicated a note on Neutralon (Kahlbaum). After discussing the preparation usually made use of in affections of the stomach, bismuth, silver nitrate, bicarbonate of sodium, etc., their occasional disadvantages, and the objections to their employment, he drew attention to neutralon, which, as he claimed,

possessed manifold advantages. It was a silicate of aluminium. It had all the useful properties of the before-mentioned preparations without any of their disadvantages. It formed a strong combination with hydrochloric acid, was a "covering" powder, and astringent; on the other hand, it had no action on the bowels, and never caused symptoms of intoxication.

Hr. Rosenheim said he had been using the preparation for the last two years in cases of neurogenous hypersecretion and hyperacidity, and he could strongly recommend it. In many cases it undoubtedly did more than the older well-tried remedies. The indications for it were:—(1) Irritative conditions with motor insufficiency; (2) Irritations of sensible origin; (3) Ulcers, here the prompt action of large doses of bismuth on the empty stomach was not present. Where the development of acid was high, a teaspoonful of neutralon was to be given after a meal in 100 grm. of water.

R. Neutralon, 70 gr.

Aq. ad., 4 oz.

Ft. haust.

A like draught to be taken after each meal.

Not the least disagreeable effects had been observed from taking the medicine.

#### GUAIACOL AS AN ANÆSTHETIC AND ANTIPHLOGISTIC.

In the *Therapie der Gegenwart*, 7/09, Hr. Hecht, of Beuthen, has an article on this subject. He says that in the treatment of inflammatory affections, the anæsthetics have of late acquired an importance they did not before possess, from the knowledge recently gained that a considerable amount of mischief was caused in these affections by the pain itself. The pain alone caused a disturbance of the tissues, whereby the natural processes of recovery were retarded. This being so, relief of the pain alone was a distinct aid to recovery. By relief from pain the tissues were enabled to recover their normal vascular tone. Amongst others, guaiacol acted most effectually as an anæsthetic and remedial agent in dilutions of from 10 to 20 per cent.

(1) In painful affections, such as articular rheumatism, caries of the wrist-joint, hysteria, the pain of tabes dorsalis, neuralgias, and neuritis.

(2) Herpes zoster (application of a 10 per cent. guaiacol ointment), pruritus vulvæ (10 to 20 per cent. guaiacol-vasogen ointment), pruritus nervosus, eczema papulosum, itching affections of the skin. The writer uses 10 per cent. of guaiacol dissolved in spirits of camphor.

(3) Minor surgery (He applies 1 to 5 grm. of guaiacol to the skin), further, in rhinology, otology, and laryngology, Laurens, after painting the parts with a 5 per cent. solution of guaiacol in olive oil, performed paracentesis of the tympanum, cauterisation of the lower turbinated bone and removed nasal polypi without pain.

(4) Erysipelas (Schnierer used a 50 per cent. solution of guaiacol in olive oil). The writer also made use of it in the eczema of infants, with a good result for the general condition also, whilst no ill effects were ever observed. He painted the parts affected twice a day with guaiacol, ichthyol, each 5 parts camphorated spirit 40 parts. In cerebro-spinal meningitis he painted on 0.75 to 1 grm. of an ointment consisting of 4 per cent. of guaiacol made up with equal parts of vaseline and lanoline. In furuncles of the skin and external auditory passages, he uses a 20 per cent. solution. In commencing phlegmons, lymphangitis, phlebitis, tendovaginitis, periostitis, he used a 10 per cent. guaiacol-vasogen ointment. Serous pleural exudations were absorbed after daily painting with guaiacol 5 parts, tr. iodi 25 parts. In croupous pneumonia of children the single dose rubbed in should not exceed 0.5 grm., and the day's dose not go beyond 1.5 grm. Cardiac affections were a contra-indication. Caution should be exercised with children and delicate females; in pulmonary tuberculosis a favourable effect was observed, as regarded the fever, by rubbing in a 10 per cent. guaiacol ointment, the pains in the chest and back were also relieved. He recommended Sonnen-

feld's formula: guaiacol 2 parts, tr. iodi and glycerine, each 10 parts.

The disagreeable bye-effects formerly observed (profuse sweats, rigors, collapse, vomiting) did not appear when the doses were appropriate. The writer as a rule adhered to the following formulæ:—

- R. Guaiacol, 10.0.  
Menthol, 5.0.  
Mixt. oleoso-bals., ad. 100.0.  
M. D. S. "The Ointment."  
(For neuralgias.)
- R. Guaiacol, 5.0.  
Ol. neroli, gtt. iii.  
Lanolia.  
Vaselin. flav., ana ad. 50.0.  
M. D. S. "The Ointment."  
(Tuberculous fever.)
- R. Guaiacol, 2.0.  
Tinct. iodi.  
Glycerin, ana, 9.  
M. D. S. For painting.  
(Serous pleuritis.)
- R. Guaiacol, 5.0.  
Ung. Ichthyol, 45.0.  
M. ft. ung. (For rheumatism.)

### AUSTRIA.

Vienna, Dec. 12 b, 1909.

#### BIER'S LOCAL ANÆSTHESIA.

At the Gesellschaft der Aerzte, Jerusalem exhibited a patient, a male, who had a bullet from a revolver lodged in one of the metacarpal bones of the hand, which he removed by means of Bier's "Venæ Anæsthesia." First an Esmarch binder is applied to the arm, after pressing all the blood from the finger to the upper arm. Then an anæmising binder is put on both upper and lower arm, and the limb is then ready for the injection of "Novocain," which consisted of 100 c.c. of a  $\frac{1}{4}$  per cent. of the alkaloid. This was injected into the vein of the arm, and immediately produced anæsthesia in the whole length of the limb. After similar preparation, he has removed different foreign bodies by this form of anæsthesia, with excellent results; one in particular was a needle lodged in the elbow-joint.

Eiselberg was of opinion that this local anæsthesia might be useful in some cases, but their range must be very limited, and could only apply to those that were unsuitable for general narcosis.

Hirsch showed another case from which he removed a fractured os naviculare carpi, or os scaphoid, from the back of the hand. He preferred extirpation in these fractures to the more conservative method, which always gives bad results owing to the non-formation of callus, which leads to thickening and shrinkage of the capsule.

#### EXPERIMENTAL TRANSMISSION OF TUMOURS IN RATS.

Ranzi and Ehrlich treated the Gesellschaft to another course of experiments in transferring sarcomatous tumours to rats. When any of these morbid growths were inserted below the skin, or implanted in any of the organs, the results were not always constant. The tumour after insertion gradually increased, as it had done from the beginning, in others it increased more rapidly, while in a third class it gradually shrank and disappeared. If an animal which had previously been infected with the tumour virus had a tumour implanted as above, it would not increase, or if it did, only for a short time, and then wither and die.

Albrecht said the "parabiotic" condition of the animal had had some influence over the growth of the tumours, and in his own experiments he found that it invariably inhibited the morbid growth. He found that when two parabiotic mice were vaccinated with carcinoma, the tumour when inserted would remain quiescent, but as soon as the parabiosis was exhausted, the tumour rapidly increased.

Landsteiner thought the organ or, site, in which

the tumour was implanted might have an influence on the growth of the tumour.

#### HEREDITARY DEAFNESS.

Hammerschlag gave a long account of his experiments on different kinds of mice, and his firm belief in Mendel's law of heredity. He found that he could not transmit deafness from animal to man, or *vice versa*. He enunciates the hypothesis that hereditary deafness of man is quantitative and not equivalent to the hereditary deafness of the dancing mouse, which, if followed through a few generations, with a pure breed, can produce an extraordinary pathological change. This cannot be proved in the human subject, but he admits there is always difficulty in the purity of breed in the latter.

#### MICROCOCOCCUS TETRAGENUS.

Fedesko presented a young man, æt. 19, who was received into hospital on account of septicæmia. Patient, a farmer, had been always healthy till four months ago, when a severe itching commenced all over the skin, resembling scabies, which caused him to scratch till blood flowed. Shortly after, a furuncular swelling about the size of a two-shilling-piece, with a few smaller ones around, formed on the arm. Three weeks before admission, rigors followed by fever, with pain in head, abdomen, and all the long bones. The carbuncle was opened, and a greyish, gluey fluid emitted. At this time the blood was examined, and micrococcus tetragenus found. In the course of a week after the opening, the temperature fell suddenly and the wound closed, leaving the patient very feeble, with pain and swelling in both legs about the calves, presumably due to thrombi in the veins.

The blood showed a highly polynuclear form of leucocytosis, with eosinophile of 3.5 per cent. At the present time no tetragenii are present in the blood, which seems to have come from the buccal cavity, being a common part of the flora of the mouth in farmers, as it is very common in all pustular eruptions in cattle, the dry scales of which the farmer is likely to breathe, or what is more probable, he may have been inoculated from the animal after a scratch or an abrasion of the cutaneous surface.

## FROM OUR SPECIAL CORRESPONDENTS AT HOME.

### EDINBURGH.

#### FREEDOM OF EDINBURGH FOR SIR WILLIAM TURNER.

—The freedom of Edinburgh was conferred on Principal Sir William Turner and the Rev. Alexander Whyte, D.D., in the Synod Hall, Edinburgh, on December 10th. On the advice of his medical attendant, Dr. Whyte abstained from receiving the honour in person, and it was intimated that it would be privately conferred on him at a later date. Lord Provost Brown, at the outset, said they were met for the purpose of bestowing on two of their citizens the highest honour the city could bestow. He referred in eulogistic terms to Sir William Turner's work in connection with the University during the fifty years which had passed since he left his native Lancaster and came to reside in Edinburgh. They recognised in Sir William Turner one of their oldest and most eminent citizens, who was not merely the official head of the University, but represented, as no other man could do, the life and work of the University since it was taken over from the Town Council fifty years ago. Sir William Turner, in reply, said he was deeply moved by the honour they had paid him. He felt that it was not on personal grounds but in his capacity as Principal of the University that he was privileged to appear there that afternoon. He then sketched the rise of the University of Edinburgh, which was a child of the Reformation, and not, as St. Andrew's, Aberdeen, and Glasgow were, created by a Papal Bull. In October, 1583, the College was founded under Robert Rollock, and there were possibly between 50 and 60 students enrolled, for in the following year Rollock conferred the degree of M.A. on 48 students. From that time on until 1858 the patronage of the University

was exercised by the Town Council, and the historical relation of the University to the municipality in regard both to administration and patronage, was preserved, in a qualified form, to the present day. The interest taken by the Corporation in the University rested on a wider foundation than that of administrative co-operation; the town realised that in the University they possessed a real and virile asset, which contributed in no small degree to the renown of Edinburgh. Sir William concluded by a personal reference to the courtesy of the thousands of students he had taught, to the confidence shown him by his colleagues in the Senatus, and to the pride which he felt in having gained the esteem of the Lord Provost and his predecessors in the civic chair.

**PROPOSED NEW HOSPITAL IN EDINBURGH.**—A private meeting of ladies and gentlemen interested in a proposal to establish a hospital for diseases of women was held in the City Chambers, under the chairmanship of the Lord Provost, on December 7th. The promoters of the scheme have in view those who are able and willing to pay towards the expense, but are not able to bear the whole cost of an expensive operation, and who, from independence or sensibility, do not care to go into such a hospital as the Infirmary, which is also a teaching school. Dr. Alexander James spoke in favour of such a hospital, which would foster the traits of independence, delicacy, and refinement. Treatment would never be free; payment would be at the rate of 10s. to £1 per week. Canon Stuart also supported the scheme, which would relieve both the better working and shopkeeper class. In the discussion which followed, and in some correspondence in the daily Press, there was a good deal of opposition to the proposed hospital. It seems that the promoters of the scheme intended to have the staff limited to men, and it was pointed out that an institution on analogous lines, staffed by women, already existed in Edinburgh, and the question of the possibility of excluding the latter was broached. It was also pointed out that a nursing home, managed by a medical committee, the charges in which were very moderate, had been in operation for a number of years. The understanding apparently was that the new institution was to have an honorary staff, and that no medical fees were to be charged to the patients. Considering how much hospital abuse there already is in Edinburgh, it would seem as though the need for a paying hospital should rather be met by extending the existing nursing home, where moderate fees, alike for board and for medical attendance, are charged, than by starting a hospital, strictly so-called, in which the patients pay a small contribution towards their keep, but secure the chief benefits—namely, medical advice and treatment—as gratuitously as in any other charity.

### GLASGOW.

**THE PROPOSED TESTIMONIAL TO PROFESSOR CLELAND.**—The committees, which were appointed in the autumn, for the appropriate recognition, in connection with the University, of the long and distinguished services of Professor John Cleland and Professor William Jack, have decided to close the list of subscriptions at the end of the present month. Upon the amount subscribed will depend, in a large degree, the precise form which the recognition shall take in each case, but the committees have thought that in the case of Professor Cleland it would be eminently appropriate to provide a fund for the advancement of anthropological and anatomical science, and a similar fund in the case of Professor Jack for the advancement of mathematical science; and in addition it might be possible to arrange for presentation to the University, in one or both cases, of a portrait or bust. These movements have been cordially received by a large circle of friends, and particularly by former students.

**CLINICAL TEACHING IN GLASGOW.**—The draft provisional order in regard to clinical teaching in the Royal Infirmary was before the University Court on December 9th, as also replies from the Royal Infirmary, the Muirhead trustees, and the Governors of

St. Mungo's College, as to the constitution of the Board of Curators. The provisional order was the subject of a long discussion, the representatives of the Western Infirmary holding that their rights would be prejudiced by the creation of chairs, as proposed. It was agreed to lodge the provisional order in Parliament next week, and, in response to the request of the Western Infirmary, to hold a conference between their representatives of the Court, that conference to report to the Court whether amendment of the provisional order was desirable.

### BELFAST.

**NEW COTTAGE HOSPITAL AT BANGOR, COUNTY DOWN.**—The foundation stone of a new Cottage Hospital was laid last Thursday afternoon at Bangor by Miss Connor, a generous benefactress to that town, under the presidency of the Dowager Marchioness of Dufferin and Ava. Thanks to the help of Lady Clanmorris, of Bangor Castle, a most suitable site has been obtained, at the south end of the new public park, with fine views over Bangor Castle edmesne and the golf links. All the medical and surgical wards are on the ground floor, while the nurses' rooms are on the first floor. An operating theatre, well lighted, is at the back of the hall, and behind it are the kitchen, etc.

**BALLYMENA COTTAGE HOSPITAL.**—The annual meeting of the Cottage Hospital at Ballymena, County Antrim, was held last Friday, when a very satisfactory medical report was read by Dr. D'Evelyn. The number of cases treated during the year was 103 intern and 35 extern, and the year closed with a balance in hand of £29. On the motion of Mr. C. McConnell, J.P., seconded by the Rev. Thos. Haslett, M.A., the following resolution was unanimously adopted: "That the best thanks of the meeting are due, and are hereby accorded, to the medical gentlemen who have given their kind and gratuitous services to the hospital."

**QUEEN'S UNIVERSITY: LECTURE ON GREEK MEDICINE.**—The first meeting of the Queen's University Classical Society was held last Friday evening, when a lecture was delivered by Professor Henry on "A Chapter in the History of Ancient Medicine." The lecturer in a most interesting manner traced the rise of the worship of Æsculapius in Greece, and described the manner of the worship at its two great centres, Cos and Epidorus. It seems to have been the custom for patients who had been healed at the shrine to present to the shrine models of the afflicted part, or tablets giving a full description of the disease and the manner of its healing, and it is these latter, practically "case sheets," which have now been deciphered, and which throw a vivid light on early Greek medicine. Very few of the cases are what one would call bare miracles; generally the god was supposed to work through means, which often included well-recognised therapeutic agents. Professor Lindsay, in moving a vote of thanks to Professor Henry, said that they should pause before coming to the conclusion that the Greeks had not accomplished much in medicine. The treatment of the patients awaiting cure in the temples was practically hospital treatment, with rest, quiet, careful regulation of diet, and often hydrotherapy. The priestly physicians also made much use of suggestion, and they even provided the patients with musical and dramatic entertainments. Then again, the surgical instruments which had been discovered at Pompeii, and which might now be seen in the museum at Naples, showed that the Greek surgeons who made and used them were worthy of deep respect. The motion was seconded by Mr. K. T. Frost, the newly-appointed Lecturer in Archæology, who described the treatment of a man whom he had seen accidentally injured during some excavations in Crete: his friends fell back upon pagan rites which had been in use in the island before the days of Homer.

On December 7th Lady Ancaster presided at the half-yearly meeting of the general council of the Cottage Benefit Nursing Association at Denison House, Vauxhall Bridge Road.



## LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

## POWERS OF THE GENERAL MEDICAL COUNCIL.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—It was with a certain uneasy feeling many of us read some of the recent proceedings of the General Medical Council in dealing with penal cases. One of the functions of the Council is, of course, to remove from the Register those members of the profession whom it may judge to be "guilty of infamous conduct in a professional respect." The term "infamous conduct" is not defined, and the members of the profession have to rely for their interpretation of it on previous decisions of the Council. In recent years the Council has seemed disposed to take a broader view than previously of the meaning of the term, but some of the cases dealt with at the recent session can only be included in a very broad view indeed. In one of the cases to which I call attention, the charge, which, however, was not proven, was that a ship's surgeon had been on certain occasions incapable of performing his duties owing to indulgence in drink. Such conduct, if it had taken place, would, of course, be very reprehensible, but one does not know where the limit is to be drawn if it is to be adjudged "infamous in a professional respect." In another case, a medical man who had held for thirty years the position of factory inspector in Manchester, was in the habit of employing a duly qualified substitute to relieve him of some of his work. On many occasions this arrangement was made with the sanction of the Home Office, but it appears that on others such sanction was not sought, though the same gentleman was employed. There does not seem to have been any attempt at concealment, since the deputy had instructions when signing the surgeon's name, to add his own initials. There was undoubtedly a breach of Home Office rules, sufficient perhaps to warrant the Home Office in dismissing the accused. In adjudging him "guilty of infamous conduct in a professional respect," the General Medical Council has, however, taken a daring step, and one which gives rise to some anxiety among the members of the profession. If every breach of official rules is to be penalised in such drastic fashion, those occupying any Government position will have to mind their P's and Q's with extreme care.

I must not, of course, be taken as excusing conduct such as that charged against medical men in the two cases I have quoted. But not all reprehensible conduct is "infamous in a professional respect." Moreover, the present constitution of the General Medical Council is not such as to make us look with pleasure on a great increase in its disciplinary powers. The Council is not as it should be, representative of the bulk of the profession. Its members know little of the daily life, the struggles and the temptations, of the rank and file. There is no reason to suppose that the ethical standard of consultants and professors is higher than that of their more humble *confrères*, or that their conduct approaches nearer to their standard. Their temptations and sins are different, and with them, as with other mortals, there is a tendency to compound for sins they are inclined to, by damning those they have no mind to. With a reformed and representative Council, there might not be the same objections to a stretching of penal powers, but at present I believe it is fraught with danger to us all.

I am, Sir, yours truly,  
POOR, BUT HONEST PRACTITIONER.

## RESEARCH DEFENCE SOCIETY AND ANTI-VIVISECTION.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—Your correspondent, "A Manchester Subscriber," has called the attention of your readers to an anti-vivisection meeting, lately held in Manchester. "It seems a pity," he says, "that the Research Defence Society cannot follow these men about with lecturers

on the other side." Let me say that the Research Defence Society has already begun that very useful part of its work. We have given about 50 lantern lectures, on the value and the necessity of experiments on animals. These lectures have been given in London and in many other places. We have two good sets of lantern slides; one of them illustrating some of the chief discoveries made in physiology and pathology (cerebral localisation, thyroid extract, diphtheria, malaria, yellow fever, sleeping sickness, Malta fever, etc.), and the other illustrating Pasteur's life and work. We have always found these lectures have been very well received, and that people are really glad to hear what our Society has to tell them. I shall be delighted to send either set of slides, with catalogue and notes, to any qualified man who will give a lecture on them. Or I will gladly give the lecture myself, if any of your readers likes to make arrangements for such a lecture in any of our large towns. But, of course, it is desirable that we should have as many lecturers as possible, and that the lecture should be given, not by a man sent down from London, but by a man who has worked for years among the people to whom he is lecturing.

I need not say that I shall be delighted to send to any of your readers the pamphlets published by the Research Defence Society, to receive names for membership, and to answer all inquiries.

The Society has already more than 2,700 members, and more than 100 associates, and is doing a lot of valuable work in a quiet sort of way.

I am, Sir, yours truly,

STEPHEN PAGET,

Hon. Secretary, Research Defence Society,  
70 Harley Street,  
London, December 9th, 1909.

## LOCAL GOVERNMENT AT KING'S LYNN.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—During the past few months, as constantly during past years, the exposure has been made in your columns of the more or less complete failure of sanitary legislation in a great number of urban and rural districts throughout the country. Last week it was villages in Carnarvon, in which scandalous disregard of elementary sanitation was described; a few weeks earlier the condition of Gravesend was exposed, and this week you give the amazing story of King's Lynn. On many occasions you have allowed me to point out that in all such cases it is not fair to put the blame entirely upon the local authority. The evils and scandals usually exist, it is true, because the authority is dominated by men who are too ignorant to understand the importance of sanitation, or are influenced by sordid personal considerations. In one of your recent reports you quoted a councillor who explained, with the tacit approval of his colleagues, that they could not put the laws in force, as it might offend their friends, that was, the owners of slum property. These men are not the most to blame; the blame lies primarily upon the public, who do not turn them off, and replace them by properly qualified and independent men. No one knows so well as the medical officers of health, to whom you refer, how terrible is their position under authorities of the inferior kind. They have to stifle their conscience, and suffer constant humiliation, knowing very well they are at the mercy of their masters, have no appeal to any higher power, and no public opinion to support them. The new Housing Bill will place further duties and responsibilities upon local authorities, and although the County Council will have some small powers of supervision, I can see no chance that the new legislation, more than the old, will be followed by anything like the harvest of good results which might be expected if the mass of our citizens were imbued with the modicum of patriotism necessary for the successful working of democratic institutions, such as ours have now entirely become.

I am, Sir, yours truly,  
A YORKSHIRE M.O.H.

December 11th, 1909.

## THE HEALTH OF DUBLIN.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—I wonder whether the Dublin Town Council ever consider what the trade of the city loses owing to its bad sanitary reputation, which is so frequently exposed in all the medical papers, as well as in your own? It is perfectly certain that I am only one of a great number of English physicians who never fail to caution their patients as to the risks they run by residence in Dublin. Those attached to the Vice-Regal court are, of course, obliged frequently to remain in that town; but I am certain that of the wealthy tourists who now visit Ireland in increasing numbers only a comparatively small proportion linger for more than a day in Dublin. What this means to the hotel keepers and tradesmen they may perhaps know, or, if they do not know, they may easily learn. It is within their power to put on the town council men more alive to the material interests of the citizens, and even imbued with humanitarian sentiments powerful enough to stimulate them in safeguarding the health and lives of the community, and especially of the poor helpless classes committed to their charge.

I am, Sir, yours truly.

M.D., F.R.C.P.

London, W., December 11th, 1909.

## OBITUARY.

FREDERICK GRAHAM TWIGG, F.R.C.S.ED.,  
M.R.C.S.ENG., L.S.A. (of Denaby).

We regret to record the death, from pneumonia, of Dr. Frederick Graham Twigg, of Denaby Main, Sheffield, which took place on the 5th, after a short illness, at the age of 49.

One of the best known surgeons in the district, well known as an enthusiast in ambulance work, Dr. Twigg indirectly owed the illness which cut him down to the zeal he displayed in the spread of first aid knowledge.

The deceased gentleman commenced practice in the district 20 odd years ago at Mexbro', and succeeded Dr. Sykes at Denaby shortly afterwards.

He was prominently associated with the establishment of the Fullerton Accident Hospital at Denaby, where he had performed many operations. He was also identified with the Mexbro' Montagu Hospital.

## MILITARY &amp; NAVAL MEDICAL NOTES.

**CONVALESCENT HOME FOR OFFICERS AT OSBORNE.**—By command of the King, this Home is now equally open to officers of the Territorial Forces with officers of the Army and Navy and Special Reserve. The benefits accruing from this Home are inestimable, and officers owe much to His Majesty's thought and consideration.

**QUEEN ALEXANDRA MILITARY HOSPITAL.**—We understand that some change is contemplated in the accommodation at this Hospital for Sick Officers, who are at present treated in special wards in the Hospital building. It is proposed to convert a house in the grounds, detached from the Hospital, and at present occupied as a residence by the Registrar, into the officers' hospital.

**TERRITORIAL MEDICAL OFFICERS AND GENERAL HOSPITALS.**—The question recently put in Parliament on this subject by Captain Faber is of some importance. The Secretary of State for War was asked whether he could state if there was a Territorial Senior Medical Officer in London suitable to take up command of No. 1 General Hospital. The reply given by Mr. Haldane was as follows:—"This General Hospital is formed by the staff of St. Bartholomew's Hospital. The Senior Physician asked that Colonel Harrison, a distinguished medical officer who had been in the

Grenadier Guards, should be appointed Administrator, and he was accordingly gazetted on 2nd November." The Colonel Harrison alluded to only recently retired, under the age clause, from the command of the Alexandra Military Hospital, Millbank. Of his fitness for administration there can be no doubt; but, at the same time, Mr. Haldane did not directly answer Captain Faber's question, which was seeking for information whether or not a suitable Territorial Medical Officer in London was available. It must be understood that in General (Territorial) Hospitals promotion goes in the unit, and not throughout the General Hospitals.

## NOTIFICATION OF SYPHILIS—ARMY ADVISORY BOARD.

—A pamphlet, entitled, "Should syphilis be Made Notifiable," has been published by John Bale, Sons and Danielsson, which deals with the pros and contras of this difficult problem. The views of French and German doctors are given, as also the difficulties and dangers of notification, with remarks on general measures. The author's name does not appear, but nevertheless the matter in the pamphlet is worthy of perusal. A leaflet has also been printed of "Recommendations of the Army Medical Advisory Board on the Prevention of Venereal Diseases. The last two paragraphs of the leaflet comprise the chief points to which the committee commits itself. These paragraphs run as follows:—"Taking into consideration the present state of expert opinion abroad, and the opposition certain to be raised in this country should the re-enactment of a statute on the lines of the Contagious Diseases Acts be proposed, the Committee has come to the conclusion that, in the United Kingdom at any rate, an attempt to grapple with the problem of venereal disease by methods of compulsory isolation and treatment is neither practicable nor expedient. Better results are likely to be obtained by the diffusion of the knowledge of the serious consequences of these diseases, and the provision of effective treatment for both sexes under conditions to which no penal stigma is attached. If this conclusion is sound, the more necessary is it that trustworthy methods of treatment should be thoroughly understood by members of the medical profession, and rendered readily available both in military and civilian practice."

## REVIEWS OF BOOKS.

## WHO'S WHO, 1910. (a)

NEXT to *The Medical Directory*, there is probably no publication of its class that is more useful to, or more often referred to by, medical men than this annual; indeed, it may be asserted without demur that there is none other that contains the same information within covers, as this red book, with its captious title. First we have the Royal Family and all about them. We then come to an "Obituary" of all persons of distinction who have passed away during the previous year. Following this we find a list of names, addresses and biographical notices, arranged alphabetically, of persons resident in the United Kingdom, of social, political, professional, religious or literary position. If one wants to know the lineage of a duke or other titular individual; the posts occupied by this or that minister, present or past; the rank of some distinguished *litterateur*, divine or poet; or the position occupied in the medical world by a member who has climbed the ladder of fame, one will find them duly chronicled in this book. Doubtless there are a few heartburnings in the breasts of some who have not yet been accorded by the Editor a niche in "Who's Who"—albeit the book grows year by year; yet this may be said for it, that although one might occasionally stumble in its pages on a nobody (comparatively), we have never failed to find the record of names and biographies of persons of distinction in every walk of life when testing its two thousand odd pages.

(a) "Who's Who, 1910." Published by Messrs. A. and C. Black, Soho Square, London.

## THE ROYAL PRUSSIAN SPAS. (a)

The Royal Prussian Board of Domains have just published an "Album of the Spas" owned by them, in order to supply the medical profession of English-speaking countries with the necessary information regarding the spas under their control. A copy of this sumptuous production has been sent us, and we have no hesitation in stating that for the beauty of its illustrations and the wealth of its textual description, we have seen nothing to equal it in books of this class. Here we have Ems, for instance, which has been aptly called "the Queen of German Watering Places," its history, climate, waters, curative powers, diseases for which they are especially applicable, and the methods of administration fully described. Then we find the bottling for exportation of the waters, the extraction of salts, the manufacture of pastiles, and other important and interesting facts beautifully illustrated in coloured and plain plates, so that with the general information as to season, baths, inhalations, promenades, amusements, etc., nothing is left to the physician who contemplates sending a patient to necessitate inquiry, nor for the patient when he arrives at his destination. The same process is gone through regarding Langenschwalbach, Schlangenbad, Weilbach, Neiderselters, FACHNIGEN, and other less-known spas, such as Geilnau, Neundorf, Relsburgh, and Norderney. It affords us pleasure, therefore, to congratulate our *confrère* Dr. Stern, of Langenschwalbach, as editor of the work, the translator (Mr. Dan Heuser, of London), and the Royal Prussian Board of Domains on their enterprise.

## HYSTERIA AND ALLIED VASO-MOTOR CONDITIONS. (b)

Dr. SAVILL, in addition to being the author of a well-known book on clinical medicine, has published many papers and lectures on diseases of the nervous system. The present volume consists of a series of lectures on Hysteria and its Congeners. This department of medicine is an attractive one, and in the author's capable hands affords ample material for thought. He has had many years of hospital experience, and has made the most of his opportunities for collecting interesting cases. He frequently refers to the work of foreign writers, Charcot especially, and has derived benefit from their teaching. He is a good dermatologist, and often describes skin complications with considerable detail. He discusses at length the interesting question whether celibacy and unsatisfied sexual desire should be considered contributory causes of hysteria, and points out that many happily married women suffer from hysterical disorders quite as grave as those of their unmarried sisters. Moreover, this condition is not more common in religious sisterhoods than amongst communities where celibacy is not observed.

The lecture on acroparæsthesia (perverted sensations referred to the extremities), erythromelalgia, and other vaso-motor disorders, is one of the best in the collection, and will be read with much interest. We have nothing but praise for the admirable manner in which the material has been brought together, and the only suggestion we have to offer is that an index would be an advantage. The author pays a graceful compliment to his wife, Dr. Agnes Blackadder Savill, for the material help she has afforded him by many valuable criticisms and suggestions. We wish the book every success.

## INFECTED EARS. (c)

WE have carefully perused Mr. Faulder White's monograph without being in the least convinced that the methods which he so persistently and so zealously advocates possess the enormous advantages which he would have us believe. Any value that such methods might possess is very largely discounted by the want

of accurate pathological work, and by the remarkable loose clinical observation shown throughout. Take the series of cases, 1 to 20, on pages 65 to 77, in one of them is any lucid account given of the condition of the middle ear, and the only functional allusion to is that of the watch, an instrument abandoned by all scientific otologists, and which is fallacious and unreliable. Case 8 is said to have "practically no hearing," and it is stated that "auditory nerve had lost its function altogether." No means are given us of judging the truth of this assertion, no tests are offered to show that the deafness is perceptive and not conductive.

Further, there is nothing new in Mr. Faulder White's advocacy of the removal of polypi, bone granulations, diseased ossicles, etc., and every otologist has done "otectomies" (a word which seems to have the same effect upon Mr. Faulder White as "Mesopotamia" upon a more celebrated character) from the outset of his career, but the ruthless scraping out of the tympanic contents *via* the meatus, done as Mr. Faulder White recommends, is a method condemned by modern workers as contrary to the most elementary principles of surgical treatment.

One of the most remarkable statements in this book is that upon page 33, that the incus is comparatively rarely diseased, a statement so utterly against the evidence of pathological fact, that one would wonder how even Mr. Faulder White can make it.

Another curious instance of the loose clinical observation which marks the narration of cases is that which makes the author say (page 47) that an "otectomy" will give "immediate relief, even when meningitis has existed for some time, no doubt by lessening tension and securing a free discharge of blood, serum, and possibly pus." We can find, in several of the cases, evidence of aught but retained pus in the tympanic cavity, certainly none of meningitis.

Had the author lived one hundred and fifty, or even one hundred years ago, he might have been a pioneer

## DRUGS AND THE DRUG HABIT. (d)

FOR many years Dr. Sainsbury was a practical pharmacologist, and published many valuable articles on the actions of drugs. Of late, however, he seems to have devoted his attention to a somewhat different branch of the subject, and to have become what we may call a psychological pharmacologist. His "Principia Therapeutica" was an admirable work, and excited favourable attention. The volume before us professes to deal with drugs and the drug habit, but it goes somewhat further than this. The first chapter is "Historical," dating back to the early days when Jove hurled his thunderbolts and Apollo drew his bow. It traces the history of medicine downwards from its beginning in myth and fable to the present time. In the second chapter he deals with the general principles of treatment, whether by drugs or other means. He by no means confines himself within the limits of the Pharmacopœia—whether British or otherwise—but takes a broad and comprehensive view of the subject. Later on he deals with the Psychic Basis of Drug Treatment, and discusses many interesting and complex subjects. The question of drug habit and control is used chiefly as a basis, which to found many highly philosophical speculations stated clearly and lucidly, and of the greatest interest. Even when dealing with the subjects of "Imperative Suggestion" and the "Newer Therapeutics," the same high standard is everywhere maintained. The author deals with many diverse matters ranging from the influence of Greek thought and the defects of the Gothenburg system to the anthropological aspects of Nature and the virtues of koumiss.

It is a delightful book, of interest to both lay and medical readers, and is written in scholarly language beyond praise. Medical writers are as a rule not endowed with any great facility of expression, and the average "Oration" delivered before some more or less learned Corporation leaves much to be desired. Dr.

(d) "Drugs and the Drug Habit." By Harrington Sainsbury M.D., F.R.C.P. London: Methuen and Co. 1909.

(a) "Album of the Spas of the Royal Prussian Domains." Agents for Great Britain, Findlater, Mackie, Todd and Co., Canal Street, London, S.E.

(b) "Lectures on Hysteria and Allied Vaso-Motor Conditions." By Thomas Dixon Savill, M.D. London: Henry J. Glaisner. 1909.

(c) "Infected Ears (Intra-meatal Treatment)." By F. Faulder White, F.R.C.S. London: The Celtic Press. 1908.

Sainsbury has set an example of masterly diction which we can only hope may, at some future time, be emulated. We shall watch with much interest the appearance of the author's next contribution.

### THE "WELLCOME" PHOTOGRAPHIC EXPOSURE RECORD AND DIARY, 1910.

As so many members of the medical profession take an interest in photography, either for illustration of cases in the medical journals or books or as an interesting and instructive hobby, this "Photographic Record and Diary," which is published annually, has become almost a necessity for them. It certainly holds an unique position amongst photographic publications, as in no other book can be found such a wealth of expert, practical information on the essentials of photography, in such a condensed and crystallised form—not a word is wasted. Practice is the keynote throughout the book—its size prohibits theory.

Every word of its expert articles and every figure in its numerous formulæ are the results of research and actual experience. Let the photographer follow the instructions given in the article on exposure, and his exposures will be correct. Let him develop those exposures according to the methods set forth, and ideal negatives will be the inevitable result.

A very important feature is the "Wellcome" Mechanical Exposure Calculator, admitted to be the simplest efficient instrument ever introduced for the purpose. It is fastened inside the back cover of the book, and cannot be lost or mislaid. It cannot get out of order, and no refills of sensitised paper or other material are required. One turn of one scale tells the correct exposure for any subject at any time of the day or year, in any part of the world.

In the 1910 edition before us, the chapters on exposure have been carefully revised, and the list of plate factors corrected and amplified to include the latest introductions. Several new features have been added. Amongst these may be mentioned—improved methods of obtaining wide variations in colour of sulphide-toned prints; illustrations showing extensive range of colours obtainable on lantern slides by simple development; together with the latest data relative to time development at different temperatures.

The "Wellcome" Photographic Exposure Record and Diary is meant for the pocket—not the bookshelf—and it is strongly but daintily bound to stand the wear-and-tear of constant reference in field and dark-room.

For the convenience of photographers in different parts of the world three editions are issued:—(1) Northern Hemisphere (bound in light green); (2) Southern Hemisphere and Tropics (bound in dark green); (3) United States of America (bound in red).

When purchasing, care should be taken to specify which edition is required. It may be obtained of all photographic dealers and booksellers, and at all railway bookstalls. Price in British Isles, 1s.

### NEW BOOKS AND NEW EDITIONS.

The following have been received for review since the publication of our last monthly list:—

ERWARD ARNOLD (London).

A Text-Book of Medical Treatment (alphabetically arranged).

By William Caldwell, M.A., M.D. Pp. 630. Price 16s. net.

RAILLIÈRE, TINDALL AND COX (London).

Aids to Microscopic Diagnosis. (Bacterial and Parasitic Diseases.) By Ernest Blake Knox, B.A., M.D. (Dublin Univ.), D.P.H. (Honours). R.C.P.I. Pp. 156. Price, cloth, 2s. 6d. net; paper, 2s. net.

Catechism of Hematology. By R. L. Watkins, M.D. Pp. 31. Price 2s. 6d. net.

Pulmonary Tuberculosis and Sanatorium Treatment. By C. Muthu, M.D., M.R.C.S., L.R.C.P., Illustrated. Pp. 201. Price 3s. 6d. net.

JOHN BALE, SONS, AND DANIELSSON, LTD. (London).

The Diet Factor in Disease. By George Black, M.B. Edin. Pp. 91. Price 2s. net.

Tropical Medicine and Hygiene. By C. W. Daniels, M.B., M.R.C.P., and E. Wilkinson, F.R.C.S., D.P.H., etc., etc. Part I. Pp. 264. Price 7s. 6d. net.

A. AND C. BLACK (London).

Primer of Statistics. By W. Palin Elderton and Ethel M. Elderton. Pp. 86.

The Writers' and Artists' Year-Book, 1910. Price  
The Englishwoman's Year-Book and Directory, 1910. Edited by G. E. Milton. Pp. 382. Price 2s. 6d. net.

Who's Who for 1910. Pp. 2,162. Price 10s. net.

Who's Who Year-Book for 1910. Pp. 162. Price 1s. net.

CASSELL AND CO., LTD. (London).

Hypnotism and Treatment by Suggestion. By J. Milne Bramwell, M.B., O.M. Pp. 216. Price 5s. 1et.

Serums, Vaccines and Toxines in Treatment and Diagnosis. By Wm. Cecil Bosanquet, M.A., M.D. Oxon., F.R.C.P. Lond., and John W. H. Eyre, M.D., M.S., F.R.S. Edin. Second Edition, Revised and Illustrated. Pp. 362. Price 7s. 6d.

Syphilis. By Sir Jonathan Hutchinson, F.R.S., LL.D., F.R.C.S. New and Enlarged Edition. Illustrated. Pp. 583. Price 10s. 6d. net.

The Case against Christian Science. By Stephen Paget, F.R.C.S. Being Papers read at the Church Congress, Swansen, and the Annual Meeting of the Congregational Union, Sheffield. Pp. 36. Price 6d. net.

THE CLARENDON PRESS (Oxford).

Browne's Religio Medici and Digby's Observations. Pp. 183 and 44. Price 5s. net.

DUNLOP PRINTING CO. (Philadelphia).

Philadelphia General Hospital Reports. Vol. VII. 1908. Edited by Herman B. Allyn, M.D. Pp. 272.

HENRY FROWDE, AND HODDER AND STOUT (London).

Constipation and Allied Intestinal Disorders. By Arthur F. Hertz, M.A., M.D., M.R.C.P. Illustrated. Pp. 344. Price 10s. 6d. net.

Oxford Medical Publications. A System of Operative Surgery. By various Authors. Edited by F. F. Burghard, M.S. Lond., F.R.C.S. Eng. In Four Volumes. Vol. III. Illustrated. Pp. 763. Price 36s. net per volume, or £6 net per set of four volumes. (Volumes I, II, and IV. published previously).

G. GILLIES AND CO. (Glasgow).

THE YEAR-BOOK PUBLISHERS (Chicago).

The Practical Medicine Series. Edited by Gustavus P. Head, M.D. Vol. VI.—General Medicine. Edited by Frank Billings, M.S., M.D., and J. H. Salisbury, M.D. Pp. 358. Price 6s. net. Vol. VII.—Pediatrics. Edited by Isaac A. Abt, M.D., and May Michael, M.D. Orthopaedic Surgery. Edited by John Ridlow, A.M., M.D., and A. Steindler, M.D. Pp. 242. Price 5s. net. Vol. VIII.—Materia Medica and Therapeutics. Preventive Medicine, Climatology. Edited by George F. Buller, Ph.G., M.D., Henry B. Favill, A.B., M.D., Norman Bridge, A.M., M.D. Pp. 348. Price 6s. net.

HENRY J. GLAISHER (London).

Soured Milk and Pure Cultures of Lactic Acid Bacilli in the Treatment of Disease. By George Herschell, M.D. Lond. Second Edition. Pp. 72. Price 2s. 6d. net.

GOVERNMENT PRINTING OFFICE (Washington).

Index-Catalogue of the Library of the Surgeon-General's Office, United States Army. Authors and Subjects. Second Series. Vol. XIV. Q.—Ryehak. Pp. 829.

WM. GREEN AND SONS (Edinburgh and London).

Pathogeny of the Neurasthenic States. By Dr. Paul Dubois. Authorised Translation by Edward G. Richards. Pp. 61. Price 2s. net.

HAZELL, WATSON AND VINEY (London).

Hazell's Annual for 1910. Edited by Hammond Hall. Pp. 608. Preventive Hygiene. An Account of the Brussels International Conferences, 1899 and 1902. By an English Member. Third and Enlarged Edition for 1909. Pp. 31. Price 3d.

J. B. LIPPINCOTT CO. (London).

The Harvey Lectures. Delivered under the Auspices of the Harvey Society of New York, 1907-08. Pp. 266. Price 9s. net.

LONGMANS, GREEN AND CO. (London).

A Practical Guide to the Administration of Anæsthetics. By R. J. Probyn-Williams, M.D. Second Edition. Illustrated. Pp. 228. Price 4s. 6d. net.

The Essentials of Chemical Physiology, for the Use of Students. By W. D. Halliburton, M.D., LL.D., F.R.S. Seventh Edition. Illustrated. Pp. 280. Price 4s. 6d. net.

W. B. SAUNDERS COMPANY (Philadelphia).

A Text-Book of Surgical Diagnosis. By Daniel N. Eisendrath, M.D. Second Edition. Illustrated. Pp. 885. Price 28s. net.

Treatment of Diseases of Children. By Charles Gilmore Kerley, M.D. Second Edition. Pp. 629. Illustrated. Price 21s. net.

Surgery: Its Principles and Practice. Vol. V. Edited by W. W. Keen, M.D., LL.D., and J. Chalmers DaCosta, M.D. Pp. 1274. Price 30s. net.

EVELEIGH NASH (London).

Home Exercises for Health and Strength. By Filip Sylvan, M.D., Berlin. Illustrated. Pp. 122.

SIMPKIN, MARSHALL AND CO. (London).

Social Disease and its Prevention. By H. N. Robson, M.R.C.S., L.R.C.P. Second Edition. Pp. 104. Price 3s. 6d. net.

WALTER SCOTT PUBLISHING CO., LTD. (London).

Health: A Royal Road to It. By J. P. Sandlands, M.A., T.C.D. Pp. 48. Price 3d. net.

WHITE CROSS LEAGUE (London).

The Falling Birth-rate and its Significance. Notes Compiled by Lieut.-Col. H. Everitt, R.M.A. (retired), Hon. Secretary, White Cross League. Pp. 40. Price 6d.

JOHN WRIGHT AND SONS, LTD. (Bristol).

Lectures on Surgical Nursing. By E. Stanmore Bishop, F.R.C.S. Illustrated. Pp. 143. Price, Leather 3s. 6d. net. Cloth, 2s. 6d. net.

Gout: Being Part VIII. of Several Clinical Treatises on the Pathology and Therapy of Disorders of Metabolism and Nutrition. By Professor Dr. H. Strauss. Authorised Translation under the direction of Nellis Barnes Foster, M.D. Pp. 70. Price 3s. 6d. net.

Golden Rules of Anæsthesia. By R. J. Probyn-Williams, M.D. Third Edition, revised. Pp. 67. Price 1s.

Golden Rules of Dental Surgery. By Chas. W. Glassington, M.R.C.S., L.D.S. Edin. Third Edition. Pp. 72. Price 1s.  
 Urgent Surgery. By Felix Lejars. Translated from the Sixth French Edition by William S. Dickie, F.R.C.S. Vol. 1. 25s. net.  
 Wright's Improved Physicians' and Surgeons' and Consultants' Visiting List. Compiled by Robert Simpson, L.R.C.P., L.B.C.S., Form A, 1s.10. Price 5s.

## MEDICAL NEWS IN BRIEF

### Medical Graduates' College and Polytechnic.

At a conversazione, held on December 10th, in the Medical Graduates' College and Polyclinic, 22 Chenies Street, Gower Street, W.C., Dr. Bashford gave a terse, vivid and plain demonstration on recent cancer research, showing that continuous mechanical irritation is the preliminary cause of cancer, then that the disease is found in Asia, Africa, and America as well as in Europe, and in animals, apart from man (birds, fishes, cats, reptiles, etc.). This was followed by an exhibition of sections showing that cancer cells grow by the help of the connective tissue cells of the host forming a scaffolding for their support, and that if an emulsion of living skin cells of the same animal be first injected and cancer cells then inoculated the malignant disease dies off, the connective tissue cells not lending their aid, apparently being inhibited by the skin injection. Diagrams showing the tendency to cure under some conditions, and the relation of age to the disease, were also shown.

There was also shown during the evening specimens of radium by Dr. W. Hampson, viz. :—

1. Pitch blende, from which uranium and radium are extracted.
2. Deposit from Bath waters, containing radium-bearing substances.
3. Radium rays sparking against zinc blende.
4. Zinc sulphide rendered luminous by radium.
5. Platino-cyanide and Willemite rendered luminous by radium.
6. Electroscopie discharged by approaching it with radium.
7. A radium clock, so-called, where the leaves of an electroscopie are made to diverge with radium in vacuo, and when the leaves rise sufficiently to touch the metal points on the sides of glass container they are discharged and collapse, and the process recommences.

### Medical Students of the R.U.I.—Action of the Colleges of Physicians and Surgeons.

THE Royal College of Physicians of Ireland, and the Royal College of Surgeons in Ireland, have had under consideration the position of medical students who have taken out some of their examinations in the late Royal University of Ireland, and who may desire to carry on their studies and to take their qualifications under the Conjoint Scheme for Ireland. The Royal Colleges have decided that candidates for examination under the Conjoint Scheme who have obtained exemption from examination in certain subjects, by reason of their having, prior to the 1st November, 1909, passed in such subjects at some University or other licensing body, be excused from payment of half the fees for the examination or division of examination from which they have been exempted.

### The Weber-Parkes Prize and Medals.

THE Royal College of Physicians of London announce that the next award under this foundation will be made in 1912, and the Adjudicators have selected as the subject of the essay for that occasion :— "The influence of mixed and secondary infections upon Pulmonary Tuberculosis in Man, and the measures, preventive and curative, for dealing with them." All essays, together with any preparations made in illustration of them, must be transmitted to the Registrar of the College (Dr. J. A. Ormerod) during the last week of May, 1912, in accordance with the regulations relating thereto, copies of which will

be forwarded from the College on application. The award will be made at some time previous to the 18th of October in that year, on which day the prize and medals will be presented to the winners.

### Proposed Open-Air Sanatorium for Working Class Consumptives.

A HIGHLY successful and well-attended meeting was held recently at Hillingdon Court, Uxbridge, in support of a scheme to provide an open-air sanatorium for working-class consumptives in Middlesex. The gathering was addressed by Dr. J. L. Lock, medical officer of health of Uxbridge Urban District; Dr. A. Charpentier, medical officer of health of the Uxbridge Rural District; and Dr. J. J. Perkins, honorary secretary, National Association for the Prevention of Consumption. A resolution was ultimately adopted supporting the scheme. Part of the money is to be raised by inaugurating a 20,000 Crowns Fund, subscriptions to which will be invited from all classes. When this sum has been collected, and a beginning made, an appeal will be issued for larger subscriptions, and other sources of money tapped. Till such time as a trust is formed local representatives will be appointed to receive subscriptions, Mr. Andrew Clark, F.R.C.S., being the one chosen for the Uxbridge district. It is intended to erect buildings which, when completed, will accommodate 10 patients; and it is believed that by spending as little as possible on buildings (which will be on the pavilion plan) the total cost will not be more than £100 per bed. A start will be made as soon as the 20,000 crowns (£5,000) have been collected, it being hoped to provide 30 beds, together with the administrative offices, for this sum. As funds permit further accommodation will be added. The beds are to be for the use of all suitable Middlesex cases whose cost of maintenance is guaranteed privately or by the local authorities or other bodies, or persons maintaining beds. The total cost per patient, it is considered, ought not to exceed 25s. per week in a sanatorium with 100 beds.

### Cardiff Medical Students' Club.

THE annual smoking concert of the Cardiff Medical Students' Club was recently held at the Royal Hotel. There was an attendance numbering 60 medical students and several medical practitioners and professors, including Professor Hepburn, Professor Haycraft, Dr. Charles Vachell, Dr. Crawford Treasure, Dr. Cyril Lewis, Dr. Arthur, Dr. Naunton Morgan, and Dr. Scholberg. Mr. Wm. Sheen was installed the President of the club for the ensuing year in succession to Dr. Maclean.

### Royal College of Surgeons, Edinburgh.

At the meeting of the College, held on the 11th inst., the following gentlemen were elected Fellows :—

Edmund C. Bevers, M.B., M.R.C.S.Eng., L.R.C.P. Lond., Oxford; Harry H. Bywater, M.B., Ch.B., Preston; Arthur J. Evans, M.R.C.S.Eng., L.R.C.P. Lond., Liverpool; William A. Fairclough, M.B., M.R.C.S.Eng., L.R.C.P. Lond., Dunedin; William Girdwood, M.B., Ch.B., D.P.H., Transkei; John P. Granger, L.R.C.S.I., Glasgow; Rowland H. Harris, L.R.C.S.E., Battle Creek, Michigan; Robert A. D. Hird, M.D., M.R.C.S.Eng., L.R.C.P. Lond., Birmingham; James Husband, M.B., Ch.B., Capt., I.M.S.; Arthur W. B. Livesay, M.B., C.M., Staff Surgeon, R.N.; Thomas R. McKenna, L.R.C.S.E., Edinburgh; Henry J. McLean, M.B., Ch.B., Wellington, New Zealand; Samuel W. McLellan, M.D., West Kirby; John Morris, M.B., Ch.B., Llanymynech; William J. Morton, M.D., L.R.C.S.E., Invernell, New South Wales; Anath Nath Palit, L.R.C.S.E., London, W.; James Raffan, M.D., Aberdeen; James M. Renton, M.B., Ch.B., Glasgow; James Russell, M.B., Ch.B., Glasgow; Clinton P. Sapsford, M.B., Ch.M., Toowong, Queensland; Charles J. Smith, M.B., Ch.B., Edinburgh; George M. Smith, M.B., Ch.B., Perth; John A. M. Smith, M.B., Ch.B., Naogoan, E. Bengal; Walter Taylor, M.B., M.R.C.S.Eng., L.R.C.P. Lond., Ontario, and Owen H. Williams, M.B., Ch.B., Liverpool.

## SUMMARY OF RECENT MEDICAL LITERATURE, ENGLISH AND FOREIGN.

*Specially compiled for THE MEDICAL PRESS AND CIRCULAR.*

[SPECIALLY REPORTED FOR THIS JOURNAL.]

**Removal of an Embolus from the Common Iliac Artery; Restoration of the Circulation.**—Murphy (*Ann. Med. Review*, October, 1909).—In treating the case of a woman whose left lower limb was undergoing dry gangrene, extending up to four inches below Poupart's ligament, decided to remove the aseptic embolus that was occluding the iliac artery. The patient had a double mitral murmur. Two and a half inches of the femoral artery was exposed, and two provisional catgut sutures were passed round it, but not tied. These were used to elevate the artery, which was incised in its long axis for one inch, and found completely thrombosed. With a delicate forceps,  $1\frac{1}{2}$  inches of clot was drawn from below. Fresh arterial blood came from below. A finger was placed on the lower end of the artery inside the ligature loop, so as to compress the vessel and stop the flow of blood. The operator failed to get fresh blood from the upper end of the artery by using a delicate forceps, a spoon, a No. 6 soft catheter introduced  $7\frac{1}{2}$  inches. A little arterial blood followed the withdrawal of a urethral catheter, which had been passed up 19 inches. A uterine sound was then introduced. At a distance of  $7\frac{1}{2}$  inches it met with a resistance. It was forced  $\frac{1}{2}$  inch further, and on withdrawal much grumous, thrombotic debris came, but no arterial blood. It was pushed a little further on, and met a firm resistance. No blood followed its withdrawal. On the third attempt, with a little additional force, it seemed to pass at  $8\frac{1}{2}$  inches into a free space. This was followed by an intense arterial flow, carrying embolic debris with all the pressure and quantity of the normal femoral artery. Hæmorrhage was controlled as on the distal side. With a fine silk suture on a full curved conjunctival needle, rapid, continuous suture of the arterial incision was made. After removal to bed, the patient complained of pain and burning in the toes, the first sensation in those parts since the onset. At the line of demarcation the circulation improved immediately, and became well established in the small vessels at the line of amputation. The writer considers that aspiration through a catheter is a better means of removing the plug than the means he adopted. Incision into the artery at the seat of arrest of the embolus, if it has been there any time, is not advisable, as the intima is roughened, and there is a tendency to subsequent thrombosis. S.

**Relief of Urinary and Genital Conditions through Surgery of the Seminal Vesicles.**—Eugene Fuller (*Med. Record*, October 30th, 1909) describes his method of operating on the seminal vesicles, and the result he has obtained in 126 cases. The incision consists of three cuts—two longitudinal converging cuts along the ischium on each side, connected in front by a transverse cut  $\frac{3}{4}$  in. anterior to the margin of the anus. The lateral and then the anterior cut is deepened, the left forefinger being inserted into the rectum as a guide. The knife is discarded, and the right forefinger is employed in the deep lymph space to separate the rectal wall from the prostate and seminal vesicles, the left forefinger being retained in the rectum until the separation is complete. A long grooved director is then passed until the end of the instrument reaches the apex of one seminal vesicle, and lies just under the right finger-tip. The right finger is then withdrawn, and the seminal vesicle is freely laid open by a scalpel passed along the groove of the director (throughout the operation the patient is in the knee-breast position with the knees well separated). The granulation tissue in the cavities thus opened may be scraped away with the finger-nail or curetted if necessary. The cavities of the seminal vesicles are separately packed with gauze, and two soft drainage tubes are placed between the gauze packing and the rectal

wall. The incision is closed except where the gauze and drainage tubes project. No subsequent irrigation is necessary. This operation is not suitable for tubercular cases; 7 of the 15 unsatisfactory results were in tubercular cases. The author divides his cases into four classes, according to the predominant symptoms displayed by the patient. These are urinary, genital, nervous and mental, and rheumatic (gonorrhœal rheumatism). No death resulted in the 126 cases operated on, and all except 10 were either cured or greatly benefited. S.

**Rupture of the Uterus during Labour.**—Lobenstine (*Amer. Journ. of Obst.*, LX., 5). In a series of 60,000 cases, 46 cases of complete rupture of the uterus and 29 of incomplete rupture, and three of rupture of the vaginal vault occurred at the Lying-in Hospital, New York. In the series there were 44 cases of complete and 11 incomplete amongst multiparæ, and five complete and 18 incomplete amongst primiparæ. The chief reasons for the greater frequency in multiparæ of complete rupture are: the general health of multiparæ amongst the poor is not as good as among women who are pregnant for the first time. In a considerable number of women who have borne children the uterine musculature has been weakened by inflammation, by scars of former incomplete tears or operations. Pelvic contractions are responsible for a very large number of complete ruptures, chiefly generally contracted pelves. Mechanism of spontaneous rupture: the uterus becomes differentiated into two definite segments as the process continues; the lower zone is so thinned out, especially when the site of a chronic inflammation, that it finally is forced to yield, the imprisonment of the lower portion of the cervix, between the presenting part, especially the head and the pelvic brim, will account very largely for the spontaneous ruptures. In those cases in which the cervix does not become imprisoned but is drawn up over the presenting part, the vaginal vault is ultimately put to such a strain that a rupture occurs. The round and broad ligaments act as real supports to the lower uterine zone when it becomes dangerously thinned. When rupture occurs, if the child is entirely outside the uterus, the latter may be felt directly behind the symphysis or over to one side of the false pelvis. The author does not believe that the uterus is always fairly contracted, but is only so in the milder grades of trauma. The uterus has more often been large, flabby, and baggy. Incomplete ruptures of the uterus occur less often than the complete; they may occur in any part of the uterus. The most common type is longitudinal through one side of the cervix, through the lateral vaginal fornix, and up into the broad ligament. The next most common type has been a transverse one through the cervix into the utero-vesical space. The rapid artificial dilatation of the cervix is undoubtedly the most common cause of incomplete rupture. In the 29 cases of the series 13 were cases of placenta prævia, and the laceration due to the dilatation or the extraction of the after-coming head. Six cases were due to rapid dilatation and extraction for eclampsia, in five cases the rupture was due to a hasty delivery in the presence of a violent accidental hæmorrhage. In only five cases did the rupture appear to be spontaneous. The most frequent cause of spontaneous rupture is old scar tissue in the cervix or vaginal vault. In the 46 cases of complete rupture there were 34 deaths; in the 29 cases of incomplete rupture there were eight deaths. The foetal mortality of complete rupture was 83 per cent., and of incomplete rupture 52 per cent. The author believes the best results will be obtained from laparotomy, except in clean cases and ones with marked shock. F.





# THE MEDICAL PRESS AND CIRCULAR.

"SALUS POPULI SUPREMA LEX."

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WEDNESDAY, DECEMBER 22, 1909.

No. 25.

## NOTES AND COMMENTS.

**The Suffragette Executive by Mrs. Leigh, the Forced-Feeding Suffragette, has fallen to the Trial.**

THE action brought against the ground. After a patient trial, the jury, without leaving the box, found a verdict in favour of the defendants, Mr. Herbert Gladstone, the Home Secretary, the Governor of Winston Gaol, Birmingham, and the medical officer of the same prison. The facts of the case are simple enough. The lady in question had already been five times previously convicted for breaches of the law. The first occasion was in March, 1907, when she was sentenced to a month's imprisonment, and the second for two months. In October, 1908, she was released after undergoing a few 'ays' detention for a three months' sentence. On the fourth she was discharged after four days of a 3 months' sentence, apparently because she refused food. In September last, Mrs. Leigh was sentenced to four months' imprisonment, with hard labour, on account of riotous conduct in connection with a meeting at Bingley Hall, Birmingham. From a neighbouring housetop she had bombarded the wall with stones and ginger-beer bottles, and, when that "ammunition" was exhausted, with slates loosened by means of a hatchet. She was dislodged by means of a fire-engine hose, and subsequently convicted and sent to gaol, where she refused food. She was thereupon forcibly fed by means of a soft tube and a funnel, the tube being passed through the nose.

**"Deplorable and Suicidal" Tactics.**

As the prisoner resisted the feeding tooth-and-nail, she naturally found it a somewhat distressing process. At the same time, it must be remembered that forcible feeding is used in asylums and gaols in all cases where food is refused by "refractories." Why should the suffragette be an exception to the rule? Were it to become a recognised proceeding to release prisoners who refused food for a few days, our streets would soon be full of discharged criminals. Indeed, it almost looks as if Mrs. Leigh had presumed on the strength of her previous experience, when a resolute refusal of prison fare for a few days saved her two months' imprisonment. The medical men who gave evidence at the trial said nothing to shake the accepted view that if prisoners refuse food, the right and proper thing is to feed them by means of a soft tube, if necessary, passed through the nose. The doctrine of the plaintiff is, apparently, that any criminal act may be committed by way of protest against some fancied political grievance, but that subsequent punishment must be that awarded to purely political offences. Such a claim is monstrous, and, if accepted, would be speedily subversive of common law and order.

Were the followers of other causes to adopt the extreme, or—as they have been aptly termed—the "deplorable and suicidal" tactics of the suffragettes, the conditions of public life would speedily become unbearable.

**The Beit Fellowships.**

THE first ten elections for the Beit Memorial Fellowships of Medical Research will be made on March 1st next. Although the candidates must be, as a rule, graduates of a British university, it is, nevertheless, possible, under exceptional circumstances, for any holder of a registrable British diploma to become eligible. The prospect of £250 for three years may make all the difference to some poverty-stricken enthusiast whose pocket is as empty of cash as his brain and heart are full of great things. Beyond the small annual grants given by the British Medical Association and a few scattered university research scholarships and fellowships, medical science has no endowment worthy of the name. The view has often been advanced in the columns of THE MEDICAL PRESS AND CIRCULAR that the duty should be undertaken by the State in the interests of the nation. Pending such recognition, the gratitude of everyone must be rendered to the millionaire citizens who have voluntarily allotted to the purpose a share of their vast possessions. Viewed in the cold light of logical analysis, it seems only right that men who have acquired great wealth amid the security of an empire should restore some of the accumulation in order to advance the interests of their fellow citizens. That, however, is not our experience with most of the owners of wealth in the United Kingdom, otherwise the University of London and medical science would not have had to wait for the Beits to set the ball rolling.

**Christmas and Children.**

WHILE the children of Christendom are turning their thoughts merrily towards Christmas, with its manifold joys and delights, medical men, on the other hand, are seeing the tragic side of the picture. In spite of the Children Act of last year, appalling cases still appear in the coroners' courts. In one case, a helpless infant of eight weeks of age was crying and troublesome; the mother, a labourer's wife, sought the assistance of a neighbour, who kindly, but unwisely, obtained poppy heads, and, having made a decoction therefrom, administered the same to the babe, with the naturally fatal result. It is to be regretted in these cases that poppies are only in Part II. of the schedule of the Poisons Act, which simply means that they must be labelled "poppies," have the word "poison" on

them, and the name and address of the seller. Still, the word "poison" should put ninety-nine people out of a hundred on their guard when offering such a decoction to an infant. We can only assume that the woman in question was the hundredth. In another case, a child died shortly after the mother had removed it from the care of a woman to whom she had been paying six shillings a week for the infant's keep. As a matter of simple statement, the woman who had received the child to nurse was not registered, and said she did not know it was necessary under the Children Act, 1908, to be registered before receiving even one child. This fact regarding the necessity for registration cannot be too widely known, as also the section making it an offence to permit children to be in a room where the fire is unguarded. This is the first Christmas since the Act came into force, and it is to be hoped that it will materially decrease the number of avoidable tragedies in child life.

## LEADING ARTICLES.

### THE BEIT MEDICAL RESEARCH ENDOWMENT.

ONE of the great present-day needs of Medical Science is endowment, which is vital to her sustenance and growth as food, water and air to a vertebrate mammal. For various reasons the State has not hitherto recognised its responsibility in that direction, possible because, in the face of many urgent and peremptory claims upon the public exchequer, it is natural to overlook those that are not vehemently advanced and for which the return is indirect and often difficult to trace. For all that, it may be questioned whether there is any branch of human intellectual activity which would yield a greater harvest to mankind in response to a wise expenditure of capital—otherwise "endowment"—than that of medical research. In the present day, when the various sciences have reached a high pitch of development, the necessity is more than obvious of elaborate apparatus, of extensive and well-equipped laboratories, of trained assistants and workers, and of a constant expenditure of money in accessories and incidentals of various kinds. Under these circumstances, the news that a rich endowment has suddenly been bestowed upon medical science will be hailed with genuine delight by the many men whose lives are devoted to the single-hearted search for the truths that still lie hidden in that great field of human activity. On December 16th, 1909, it was formally announced that the Senate of the University of London had received a munificent benefaction in the interests of medical research. The origin of the gift was a legacy of £50,000, left by the late Mr. Alfred Beit, to found an "Institute of Medical Sciences." As the foundation of that institution was found to be, for various reasons, impossible, Mr. Otto Beit, the brother of the testator, decided to increase the sum mentioned to £215,000, so as to yield an annual income of about £7,500. This Fund, which is to be named "The Beit Memorial Fellowships for Medical Research," is to be devoted entirely to the furthering of medical research work in all its branches. With that object, a sum of £250 a year for three years is

to be granted "to any man or woman of European descent, graduate of any approved university within the Empire, who is elected to a fellowship." The elections are made by an advisory board of not less than five nor more than seven persons. The first list consists of Sir T. Clifford Allbutt, Dr. J. Rose Bradford, Dr. James Kingston Fowler, Dr. C. J. Martin, Professor William Osler, and Professor F. H. Starling. This list of names is well chosen, and guarantees that the elections will be made with catholic fairness and without a disproportionate regard to the academic influence. In some ways, the tendency to look solely to the schools for fresh scientific discoveries is to be deprecated. It has happened again and again that a great advance has resulted from the chance of a happy accident, and has come from the obscure and humble worker rather than from the universities. At the same time, the value of collective comparison and of well-informed investigation is obvious, especially when reinforced by the aid of modern appliances. It will be of interest in this connection to note from what quarter the discovery of the origin or the prevention or the cure of cancer will eventually emanate, whether from the independent observer or from the richly-endowed laboratory. From this point of view it is satisfactory to note that some modification is to be made in the original statement contained in Mr. Otto Beit's letter to the Senate, in which it is stated that the fellowships will be conferred upon graduates of universities of the British Empire. The deed of foundation contains a provision which admits qualified non-graduate medical men under certain conditions. It runs as follows:—"(11) Provided always that in certain cases the trustees may, if the advisory board so recommends, accept the possession by a Fellow at the date of election of a medical diploma registrable in the United Kingdom as a qualification for election to a fellowship, in view of his, or her, having taken such degree, or passed such examination." No time is to be lost in putting the scheme into effect, for the first elections are to be made in March, 1910, and subsequently on January 1st of each year. A list is published of recognised places where research work may be conducted, and powers are given to the trustees to recognise other places approved by the advisory committee. On the whole, the details of the Fund appear to have been carefully and wisely considered as befits a scheme of so great a national importance. The wealth of great philanthropists anxious to relieve the sufferings of their fellow creatures could hardly be more logically bestowed than in endowing the work of that science whose mission is to relieve and prevent pain, and as far as may be to promote health and banish disease. The contrast between the superabundance that is able to make so royal a gift and the poverty of the average medical research worker is one to make the philosopher think. None the less, the medical profession of the British Empire, no less than the people of that great empire, have to thank the two brothers, Alfred and Otto Beit, for a gift that is calculated to advance the interests of humanity throughout the world for generations yet unborn.

## CURRENT TOPICS.

### Christmas Fare.

THE fact that Christmas comes but once a year has been the excuse from time immemorial for an extra supply of good fare. Thanks to the robust constitution that marks the average Britisher, he is able to play a good knife and fork without fear of an aftermath of digestive troubles. The same thing is happily true of the average wholesome children of the United Kingdom, who are able to stuff themselves with good things much in the fashion that a turkey is stuffed with chestnuts and sausage-meat. Yet your plump, red-cheeked, lively little boys and girls rarely do themselves any great harm by feasting thus. The fact is, that English fare at Christmas is, above all things, in its essence, solid, wholesome, nourishing and, on the whole, digestible. It is only the weaklings who are likely to be harmed thereby, children who are habitually overfed or improperly fed, and whose pale faces testify to the want of fresh air and exercise and to daily indulgence in sweets and rich food. The verdict of many centuries has been given unanimously in favour of turkey and plum-pudding for the Christmas dinner, and they are likely to hold the field against all comers for many a century to follow. By the way, without wishing to cast a gloom over a merry season, one may speculate in passing what sort of fare vegetarians place on their Christmas board. Is it possible that some of them yield to the temptations of ordinary Christmas fare? Picture a vegetarian in the Tropics on Christmas Day refusing a slice of roast turkey on principle. Could the concrete pathos of a Shakespearian tragedy summon to our imagination a more heartrending spectacle than that? History does not relate whether the temptations of St. Anthony included a real good Christmas dinner. May all our readers—young and old—be tempted in that wise, in the living present, that is to say, on December 25th, 1909—and may they yield the point gracefully and plentifully.

### Another Successful Action for Oyster Typhoid.

LAST week we noted a case in which damages were given for enteric fever contracted from oysters. Since that occasion another action in the King's Bench Division before the Lord Chief Justice seems to supply an instance in which typhoid fever was traced with almost complete scientific precision to contaminated oysters. Two naval lieutenants partook of raw oysters when dining at a Chatham hotel. Within the usual time they both fell ill of typhoid fever. One died; the survivor went through the illness at the house of his brother, Dr. Cardale. As soon as suspicious symptoms showed themselves the diagnosis was confirmed by Vidal's test. It was proved that the oysters came from the Medway, and that notices had been posted warning the public that owing to the prevalence of typhoid fever in Chatham, it was not safe to eat shell fish from the river unless boiled. There were infected oyster beds in the Medway which had been closed by the Fishery Commission. All the other cases of typhoid at Chatham had been traced to cockles only. It was alleged, in course of the defence, that the plaintiff

having seen the notices ought himself to have been on his guard. It seemed impossible to dispute the fact that the poison was conveyed by the oysters. With the question of the legal liability of the hotel keeper we have at present nothing to do. The jury gave a verdict for the plaintiff with substantial damages, but as a stay of execution was granted on the usual terms, it is of course not at all certain that the verdict will not, in the end, be overthrown.

### The Quality of Milk.

THE Armstrong College has recently issued a report on milk, which, although it states no new facts, gives a solid scientific foundation to current knowledge of the variableness of milk in the matter of its constituent butter fats and other solids. It has been proved that the quality of the milk yielded by a cow from time to time depends very largely upon the nervous condition of the animal. Transient excitement may cause shortage of fat, which tranquillity will at once redress. This fact renders evident the possible fallacy in attempting to vindicate a farmer by milking a cow in presence of a prosecuting authority, and analysing the quality of the yield. It also, on the other hand, suggests a plausible defence in cases in which the milk may really have been deliberately sophisticated. The quality of the milk of the individual cow is liable to vary within very wide limits, from other causes mostly beyond control. The quality does not seem to be, save in the smallest degree, controlled by diet; the food affects the quantity almost alone. Cows that are milked frequently yield more fat than those left for longer periods; and it is found that when cows are milked three times instead of twice a day the extra quality of the milk compensates for the added labour. Jersey cattle gain great praise for the quality of their milk, and it is suggested that a good proportion of this breed should be included in all herds. The desirability of mixing the whole of the milk from the herd before putting it on the market seems strongly suggested by consideration of all these facts.

### The Endowment of Research.

IN his address at the Imperial College of Science, on Thursday last, Professor Sedgwick, in language almost identical with that of our leader of November 24th, explained and deplored the attitude of the public and the Government towards the workers in pure science—those who pursue knowledge for its own sake, without reference to its practical application, being urged on by what has been called a "Divine curiosity." Professor Sedgwick pointed out that the indifference with which the poor researcher is regarded by the people is shown by the almost entire absence of support on the part of Government, £4,000 a year given to the Royal Society representing the total national outlay in this direction. Professor Sedgwick then went on to discuss the problem also broached in our article—the problem how best to help workers to pursue lines of research for which they have displayed fitness. Without trial it is impossible to ascertain whether a man possesses an aptitude for scientific investigation; and Professor Sedgwick suggested the establishment of studentships in

considerable numbers, from the holders of which those that showed the necessary gift could be selected. He pointed out how necessary it would be that those who failed after being encouraged to try should be compensated, or provided with an outlet to find work in practical life. Professor Sedgwick finally pointed out that there was another way in which the difficulty could be met, and that was the way adopted by the founders of the Imperial College—namely, by the combination of a school of science with a school of technology.

### The Health of the Army.

THE Army Medical Department, of which Lieut.-General Sir Alfred Keogh is Director-General, is to be congratulated on the highly satisfactory character of their reports on the health of the troops during 1908. The death-rate for the year compares favourably with the rate among the male civil population of similar ages. The reduction in disease is clearly shown to be due to general all-round improvement, and not to any one specific cause. Some effect must doubtless have been produced by the marked decline in alcoholism, due to the efforts of temperance reformers. A steady improvement in the health of the troops has, however, gone on since 1902, when the hurtful effects of the South African campaign began to pass off. Since that year the sick-rate figures have been reduced by nearly one-half, whilst the wastage through deaths and discharges has been lessened to an equally remarkable degree; and a marked diminution in the number of invalids sent home has also been noted. The greater care now exercised in recruiting, men of questionable physique being rejected, has no doubt had a share in bringing about the improvements noted. But the results must be in the main ascribed to changes in administration, improved methods of treatment, and improvement in sanitation, in the wide sense of the word.

### The "Medical Directory" for 1910.

THE *Medical Directory*, issued by Messrs. J. and A. Churchill, is one of the best-known books in the profession. To say that it should be on every medical practitioner's study table—echoing a familiar phrase of the reviewers—is superfluous, because in the vast proportion of cases it already occupies that position. The present volume represents the sixty-sixth annual issue of this standard work. Those of our readers who may have come across the first few issues know the contrast between the diminutive issues of sixty years or so ago and the portly, handsome volume of to-day. This year there are several alterations in the editorial matter. The numerical summary of the medical profession, for instance, is extended, and in its present form offers a handy analysis under the headings of London, provinces, and the various kingdoms. The total numbers for 1910 amount to 40,558, as against 39,992 in 1909. The increase of 566 on the preceding year, which in its turn registered an increase of 289, does not by any means point to any material lessening of the overcrowding of professional ranks, even when full allowance is made for the increase of national population. Another novel feature is the publication of an excellent summary of the chief facts of British health resorts, occupying some fifteen

pages. This section should be useful to medical men as a ready means of reference. There are also some improvements in the lists of hospitals and in other directions. The price of Churchill's *Directory*, it may be noted, remains unchanged. We have pleasure in wishing this old friend prolonged life and prosperity.

### Irish Hospitals and English Nurses.

WE have often commented on the unfairness shown toward Irish and Scottish diplomates and fellows in the conditions of appointment to the medical staffs of many hospitals in England. The Irish and Scottish qualifications are in no way inferior to the English, and it is a foolish and discreditable prejudice which attempts to limit the field of competition. We regret to notice that in Ireland there are signs of a similar exclusiveness—not, it is true, as regards the appointment of medical men, but as regards the appointment of nurses to important positions. This exclusiveness is not, we are glad to say, exhibited by the hospital authorities; but, on at least two occasions lately, when an English-trained nurse was appointed to the matronship of a Dublin hospital, there has been a certain amount of popular clamour. A few weeks ago, after very careful consideration, the Board of one of the Dublin hospitals elected to the matronship of their institution a lady trained at St. Thomas's, who was, in their opinion, the best fitted for the post of the candidates who presented themselves. To this action exception has been taken in various unimportant quarters, and the Dublin Corporation, as a contributor to the hospital funds, has demanded an explanation. One would expect that the Corporation would find enough scope for its energies in its proper affairs, but instead of attending to the health of the city, it prefers to question the actions of a careful and successful board of governors. The folly of the policy to which the Corporation apparently gives its support must be obvious to all. It is the interest of the hospital, as of any other concern, to obtain the best officials it can. But, apart from this, it must be remembered that an enormous number of Irish nurses earn their bread in England, where they are eligible for, and obtain, many of the best appointments. If English nurses are debarred from Irish appointments, retaliation must be expected.

### The Ethics of Anti-Vaccination.

MR. POMEROY's evidence in the recent action, together with his letter, which we print to-day, forms a fairly complete exposition of the intellectual calibre, and the mental condition, of the typical anti-vaccinationist and anti-vivisectionist. The psychology of the class of which Mr. Pomeroy is a type, and the ætiology of the state of obsession which characterises them, have been fully discussed, and are sufficiently understood. These people are entirely ignorant of the fundamental facts of science necessary for the understanding of the questions with which they interfere, and are insensible to every argument that clashes with their fixed ideas. Mr. Pomeroy was not called upon to explain how it is that doctors vaccinate their own children; but the fact that the profession throughout the civilised world—those who earn money by the operation, and those into whose work it never

comes—offer that concrete bit of evidence as to their perfect faith in the harmlessness and efficacy of vaccination, ought to have convincing weight with people who have not had the scientific education needed in forming an independent judgment for themselves. To Mr. Pomeroy, vaccination is synonymous with syphilitic inoculation, and the only question for him is, whether the "fee-hunters are too stupid to understand the real nature of cow-pox (also identical, it seems, with syphilis), or whether the desire for fees prevents them from seeing this"; and he takes the latter view. Pity for Mr. Pomeroy, and his class would alone prevent the laughter these wild utterances might provoke, even if the thought of the tragic results of the propaganda to which they devote themselves did not put a check upon mirth. The widespread distrust of medical science to which the persistent work of such fanaticism gives rise among the ignorant of all classes, drives vast numbers into the hands of fraudulent quacks, or leads them to pin their faith on bogus remedies. The result is, the infliction of an incalculable amount of easily-preventable misery, and the deaths of many people from organic diseases amenable to scientific treatment, but allowed to assume a mortal phase whilst reliance is being placed upon gross quackery in one form or another.

## PERSONAL.

THE QUEEN has sent a present of game to the Chelsea Hospital for Women.

THE PRINCE OF WALES, on December 13th, presided at a meeting of the General Council of King Edward's Hospital Fund for London, which was held at Marlborough House.

THE PRINCESS OF WALES has sent a gift of pheasants to the British Homes and Hospital for Incurables at Streatham.

FIELD-MARSHAL THE DUKE OF CONNAUGHT has been pleased to appoint Sir Alfred Downing Fripp, K.C.V.O., to be Surgeon in Ordinary to his Royal Highness.

MR. T. E. GORDON, F.R.C.S.I., has been elected Surgeon to the Orthopaedic Hospital, Dublin.

MR. ROBERT J. HARVEY, F.R.C.S.I., has been elected Surgeon to the Richmond Hospital, Dublin, in place of the late Sir William Thomson, C.B.

DR. J. L. MAXWELL presided at a breakfast given by the Society for the Suppression of Opium Smoking at the Hotel Cecil, on December 20th.

SIR ARTHUR CONAN DOYLE has been appointed president of the newly-formed branch of the Research Defence Society at Brighton.

DR. SALTER, who contested the last Parliamentary election in Bermondsey in the Socialist interest, has withdrawn from his candidature for the General Election.

THE Public Control Committee of the London County Council proposes to invoke the aid of the Lord Chancellor in the case of the coroner of the Central District of London (Dr. G. Danford Thomas), who, owing to deafness and other illness has been unable to perform his duties for some time.

THE LORD MAYOR OF LONDON presided at the Mansion House on December 17th, for the annual general meeting of the constituents of the Metropolitan Hospital Sunday Fund.

LORD CREWE (Chairman of the Governors) distributed the diplomas, medals and prizes to the successful students at the Imperial College of Science on December 16th.

MR. OTTO BEIT has supplemented the £50,000 given by his late brother Alfred by a sum of £165,000 for medical research.

MR. GEORGE CROCKER, the son of a Californian railway financier, who left an estate of £6,000,000, has given to Columbia University a fund estimated at £300,000 for the investigation of cancer. Mr. Crocker and his wife were both victims of that disease.

LORD ROSEBURY performed the ceremony of opening the reconstructed hall and museum at the College of Surgeons of Edinburgh on December 14th.

THE Nobel prize in medicine has been awarded to Professor Theodor Kocher, who has gained a world-wide reputation in connection with the surgery of the thyroid gland. Professor Wilhelm Ostwald, of Leipsic, has gained the prize in chemistry, and the prize for physics has been divided between Mr. Marconi and Professor Karl Braun, of Strassburg.

PROFESSOR KOCHER, who has been awarded the Nobel prize for medicine, has announced his intention of giving half to the Red Cross Hospital at Berne and the rest to the poorer medical students of the same place.

WE regret to record the death, on December 14th, of Sir Alfred Jones, K.C.M.G., who, though not a medical man, was a very great friend to medicine, and especially tropical medicine, his instrumentality having founded the Liverpool School of that branch of science.

THE late Sir Alfred Jones left the whole of his estate, subject to certain family and business legacies, to charity, and more especially to further the study of tropical medicine.

THE following appointments and elections have been made at a meeting of the Council of the Royal College of Surgeons:—Mr. J. F. Colyer, M.R.C.S., L.D.S. Eng., Honorary Curator of the Odontological Collection in the museum; Mr. H. F. Waterhouse, F.R.C.S., Surgeon to Charing Cross Hospital, was elected a member of the Court of Examiners; Dr. G. F. Blacker, Obstetric Physician at University College Hospital, was elected an Examiner in Midwifery under the Conjoint Examining Board; Mr. R. J. Godlee was elected a representative of the College on the Senate of the University of London; and Mr. A. P. Gould was elected a member of the Committee of the Imperial Cancer Research Fund.



# A CLINICAL LECTURE ON VARICOCELE. (a)

By D'ARCY POWER, F.R.C.S.,

Surgeon to St. Bartholomew's Hospital.

GENTLEMEN,—I thought that to-day I would go over with you the question of varicocele. The operation for it always seems to be a simple one, and it is somewhat remarkable in that patients come to the surgeon and actually ask to have it done. Usually, of course, the surgeon has to exercise some degree of suasion to get the patient to consent to an operation. And I want you to refrain from thinking too little of the operation; it is not so trivial as it may appear, as you will presently see. As this man stands before you, notice that the left side of his scrotum is more pendulous than the right; and as he moves his penis to one side you see the whole of that side has an elongated full appearance. There are a few veins running over the surface, and within there is a whole plexus of veins, constituting the varicocele. If he were to lie down, that varicocele would disappear; if he coughs, there is a slight impulse, so that, if you were very careless, you might mistake it for a hernia. If, when he is lying down, you put your finger on the external ring and ask him to get up, you find the varicocele comes back, in spite of the pressure which you are exercising there. But a hernia could not come out through the external abdominal ring. The reason the varicocele comes back is, that you do not compress the spermatic artery, and therefore it still conveys its blood, and the veins fill up. And, secondly, when you press on the veins you prevent blood passing along. This patient, æt. 32, tells us he only noticed this trouble three years ago, when he was first told about it. From time to time he has had pain and dragging sensations; and his testicle has occasionally been swollen, without any definite cause. He now comes asking for something to be done for it. I may tell you, now that the patient has gone, that apparently he has had gonorrhœa, when he got some epididymitis, which was much worse on the left side, and no doubt it is chiefly that which brought him here.

The causes of varicocele, as far as we know, are the same as those producing varicose veins. People are born with weak veins, and that weakness, in the case of the testicle, is exaggerated, and the large pampiniform plexus being affected, the blood does not pass readily or easily through. Beyond that, there is no very definite cause assignable. The condition occurs usually between puberty and 35 or 40 years of age. You rarely see varicocele occurring in men over 40, when the generative functions begin to fall into abeyance; moreover, at and just after this age, varicoceles which have existed earlier tend to disappear. So in a man of 45 to 50 one would not advise operation for the condition, but palliative measures.

The symptoms are partly those which I have told you; there are also mental symptoms, with discomfort, congestion, and inflammation. The mental symptoms are out of proportion to the others; the patient worries about his condition, especially if he is neurotic. So it is common to find that these patients have had all kinds of treatment, and they

have often been to quacks, who prey upon their anxieties.

*Sequelæ.*—But really the dangers attending the condition are not very great. As in the case of varicose veins anywhere else, an accident may lead to rupture, that rupture causing hæmatoma; and if the patient does not lie up and rest, the hæmatoma may become infected, and lead to suppuration. Occasionally, instead of rupturing, the enlarged veins in a varicocele get inflamed or thrombosed. You may be sent for to a case of thrombosis occurring in connection with varicocele, which has come on spontaneously; and, unless you are careful in your examination and in your inquiries, you may jump to the conclusion that the patient has got a strangulated hernia. But you should not mistake a strangulated hernia for varicocele which has become thrombosed; and it only requires a little care to distinguish them. What most commonly happens is that, as the result of chronic congestion and imperfect blood supply, the testicle gets softened, and it may become smaller than its fellow. Mostly the condition is on the left side. The subject of the varicocele is probably frequently examining his testicle to see if it is softer than it was a little time back. If you assure him that it is usual to have softening or wasting of the testicle, but it is not serious in any way, you may comfort him mentally.

The treatment, which is what I want to specially draw your attention to to-day, is of much more importance. I have said that patients come asking that the operation may be done; the fact being that there are certain public services—Police, Naval and Military, etc.—in which candidates are debarred from entrance if they have varicocele of any considerable size. Such cases will come to you in private, as well as go to hospitals. If you are unwise you will consent and will undertake the operation lightly; you will do what you have been accustomed to see done. But no surgical operation is really trivial, and in that for varicocele there are many pitfalls for the unwary. One can impress that upon oneself in this way: When I was dresser here, in 1882, only one operation for varicocele was done in this hospital in that whole year. Surgeons had a rooted objection to operating on any vein. They had been told that people who had veins operated upon died. That was true in a large number of cases; they died of pyæmia. Some years after that no operations were done for varicocele at all, so I suppose that one case in 1882 must have died. About 1887 or 1888, when Listerian methods were more satisfactorily carried out, some twenty operations were done in a year in this hospital. And then followed a significant blank for two or three years. From 1897 onwards, the number of varicoceles operated upon has increased; it was 88 or 90 two years ago; and we had 55 last year. Mr. Pringle has looked out twelve of my own cases. That number would have lasted our older surgeons several years. Yet I am not quite satisfied with the operation for varicocele as it is done at the present time. We have tried a variety of methods, and, as the old method was purely palliative, we

(a) Delivered at St. Bartholomew's Hospital, on Wednesday, Oct. 27th, 1909.

need not trouble further about that. Wormald's ring was put over the scrotum and pressed tight above the testicle, and the weight of the column of blood was controlled in that way. Then came the disastrous time when underpinning through the scrotum was done, and a piece of silk was tied crosswise above and below. In one or two hands it acted very well, but others who tried it found suppuration occurring and very extensive orchitis. That method has also gone out of vogue.

Then there came the modern method, which was divided into two kinds of cases. The first procedure was to cut down through the scrotum—I will give you the details directly—to tie the pampiniform plexus, cut the ligatures short and close to the wound. This operation was done for a long time, and gave very satisfactory results: that is to say, when the results were favourable they were very satisfactory. But here again a considerable proportion of cases suppured; it was very difficult indeed to keep the scrotum clean, because you know it puckers up, and the dartos keeps the skin in such folds that it is difficult to get to the bottom of them. The methods which were adopted were, I think, somewhat favourable to suppuration. We were in the antiseptic period, and we washed the scrotum with strong antiseptics like carbolic or perchloride. The skin there is very delicate, and consequently, after the antiseptic had been on 24 hours, there was an eczematous condition of the skin, which was a favourable site for suppuration to commence at. There were many failures; the wound did not heal by first intention and the suppuration sometimes extended to the testicle, which sloughed. So we gave up that method.

We improved upon it, as we thought, and instead of cutting into the scrotum, we went higher up, by the external abdominal ring. We made an incision as if for the radical cure of hernia; and instead of tying the pampiniform plexus, we tied the spermatic veins, took out a little piece, and shortened the cord. But we had been too clever. I have been through the cases we have had, and a certain proportion of them have failed, because, although there was good union by first intention, so much of the veins was removed that the testicle suffered, and there has resulted an undue proportion of hydroceles, and a considerable amount of swelling of the testicle itself; so that people who came with varicoceles have been sent away with chronic orchitis, because there were no veins to carry back the blood from the testicle. For that reason, during the last two or three months I have gone back to the older plan of incising in the scrotum, and then I know it is very unlikely I shall take away the whole of the veins, because one cannot separate them completely; there are always enough left to allow of the passage of blood from the testicle. But we have avoided packing them or preparing them with the antiseptics which were used on previous occasions. Instead of using antiseptics, we thoroughly clean them up, and use either very dilute solutions, or salt solution. And nearly everything is used dry: we employ as little lotion as possible. And those cases have done excellently well, much better than the old high operations.

When you have to do the operation, just remember some details about it. First of all, you prepare the patient in such a way that no irritation of the skin is caused; you must bear in mind all the time that the skin here is very delicate, and you must not set up eczema or dermatitis by your preliminary treatment. I would rather the patient were washed on the operating-table with ether soap and biniodide lotion, and at once proceed to operate, rather than prepare the skin overnight, and pack him up, with

the subsequent risk of chafing. You want a good assistant, who should devote himself to nothing except keeping the vas deferens away from the vessels which you are going to tie. He has enough to do if he holds the scrotum up with the index fingers and thumbs of his two hands, and is sure he has got the pampiniform plexus just underneath the skin, and that the vas is below his fingers. He makes the skin quite tense, and when he has done that, you incise between the two fingers, *i.e.*,  $1\frac{1}{2}$  inches. Cut down through skin, and then through fascia, three or four or five layers, as the case may be, until you come down to the veins themselves. The mistake is to try to pass the needle under the pampiniform plexus before you come down to it. This plexus lies in several layers of fascia, and you must divide each if you are going to get the best results; go right down until the veins shine out as black things; and even then there is another layer of fascia which you can divide. So the essence of the operation is freeing and seeing the pampiniform plexus. And do not let your assistant move his fingers, otherwise the vas deferens will slip up, and you will almost certainly tie the vas with the veins. Remember that the veins lie packed together in little packets. Take an aneurysm needle, pass it beneath the packet of veins which you have freed. It is a proof that you have freed them sufficiently if you have to use no force to pass your aneurysm needle. If the needle will not pass freely underneath the veins, or if you have to cut down upon the end of it you have not divided all your fascia. Better it is to take your needle out again, take up your scalpel and forceps again, and go on cutting through the fascia until you can pass your needle readily, than to force the aneurysm needle through tough fascia. When you pass your needle under the veins, you should be able to move it to-and-fro at least an inch, so that there is an inch of that plexus exposed in the wound. Pass a double ligature through the eye of the needle, withdraw your needle—and your ligature will be of catgut for choice; then tie the pampiniform plexus in two places, where you have freed it, that is to say, an inch apart. The parts are many, and you must get your knot tied into the veins, slowly, evenly and securely. When you have the ligatures tied, put a pair of pressure forceps above and below each. It happens to even the best of us that when we think we have securely tied a ligature, it slips off; therefore you must have your pressure forceps to pull upon the ends if this accident should happen. Cut out a piece of the veins between the two ligatures, generally about half an inch. You want to leave a fair piece of vein between the end of the ligature and the point where you divide; otherwise the ligature will certainly come off, and if it does, it is a disaster, as far as that particular case is concerned. There is certain to be much bleeding from the ends of the veins. A good varicocele operation is bloodless from beginning to end, and that is a very important factor in the subsequent repair. If you are at all careless or rough you are certain to have a hæmatoma. You have two ends of divided veins, and the first thing which strikes you when you divide them is: "I have certainly got that vas after all." But it is not. When you look at the veins they are so thickened, and the walls are so thick that unless you cut sections and microscope them, you cannot tell the vas from veins. These thickened veins nearly always stand out. Take the two ends of the catgut ligature, and tie them together, so that you bring the ends of the veins into apposition. There must be a lump; you cannot help it. It is of no use trying to get them into exact apposition. Then bring the skin edges of the wound

together; you need not trouble about the fasciæ, and be very careful that the skin edges are not turned in. The proper way to get them into apposition is for your assistant to let go the scrotum which he has been holding all this time, put a blunt hook on either side, and pull the ends tight. Then you can easily sew the edges. It is better not to use a continuous suture, use three or four interrupted sutures of fine catgut. If you get everything quite dry the subsequent dressing should be colloidion and wool. In about seven or eight days' time the patient can go out; there is no reason to keep him in bed after taking the stitches out.

NOTE.—A Clinical Lecture by a well-known teacher appears in each number of this Journal. The Lecture for next week will be by Walter C. Stevenson, M.D., B.Ch., Surgeon to the Orthopædic Hospital of Ireland, Dublin. Subject: "The Treatment of Congenital Talipes Equino-Varus in Infants."

## ORIGINAL PAPERS.

### CONCERNING TRACHOMA. (a)

BY ARTHUR H. BENSON, F.R.C.S.I.,  
Surgeon to the Royal Victoria Eye and Ear Hospital, Dublin.

GENTLEMEN,—My first duty is to thank you for the honour you have done me in electing me President of this Section, and I do so with all sincerity.

My next duty is to thank Professor White, on behalf of the Section, for his long and faithful services as Secretary, and to greet his successor, Dr. Boxwell.

It is a very usual thing, in opening a new session, for the President to review the work done during the previous session; but in the present case such a recapitulation would seem to me to be profitless.

I prefer, rather, to call your attention to one subject of the first importance to all humanity, and to the inhabitants of this country in particular, in the hope that by your efforts a serious blank in our knowledge may be filled.

Trachoma, or granular ophthalmia, is one of the greatest curses that weigh down and oppress the poor in this distressful country.

It is the plague of all our workhouses, industrial schools, and eye hospitals.

It is the "opprobrium ophthalmicum"; for though, like the poor, whom it principally attacks, it is always with us, yet we have no certain knowledge as to its true nature or its ultimate cause.

I trust that some of those members of the Section who have energy, and enterprise, and time, and opportunity, will undertake original investigations into the essential cause of the condition which, year by year, is responsible for the blinding of thousands and the partial incapacitating of tens of thousands of our fellow-countrymen.

Whoever discovers the actual essential cause of trachoma will thereby erect for himself a monument more lasting than brass, and will have earned the gratitude, not only of a nation, but of the whole world.

Much has already been done to prepare the way.

A few years ago every form of conjunctivitis was described and catalogued solely in accordance with its clinical appearances and characteristics.

Now most of them are identified bacteriologically, and their specific cause is known with certainty.

Acute catarrhal conjunctivitis is known to be caused by the slender bacillus of Koch and Weeks.

The Morax-Axenfeld diplo-bacillus produces a characteristic form of blepharo-conjunctivitis.

The pneumococcus produces a less characteristic form of conjunctivitis, with pinkish œdema of lid margins, and often rapid subsidence of the symptoms, reminding one of the "crisis" in acute pneumonia.

Löffler's diphtheria bacillus produces its characteristic membranous conjunctivitis.

The gonococcus is responsible for gonorrhœal

ophthalmia, and many cases of ophthalmia neonatorum.

The streptococcus, bacterium coli, and tubercle bacillus each produces forms of conjunctivitis that are definite clinical entities, and as the cause is recognisable, so the line of treatment emerges from the twilight of empiricism into the full day of scientific certainty.

But trachoma, which draws its victims from all periods of life, and with bulldog tenacity holds them in its grip, as yet owns to no specific cause, yields to no specific toxin.

We still treat it much as it was treated fifty years ago (or, for the matter of that, two thousand years ago), and with a most humiliating want of success.

All the evidence points to its being micro-organic in origin, but the special causative germ, this "scarlet pimperl" of bacteriology, still eludes the vigilant search of microscopes in every land.

Every few years our hopes are raised by the publication of a full description of the "notorious criminal," with portraits of his development, from youth to age, but, so far, in every case he has been able to prove an alibi, and has left the Court without a stain upon his character.

Just at present the trial of the most recent "suspect" is in full swing. Through the kindness of Dr. Mooney, I am enabled to show you not only his portrait, but the individual himself under one of the microscopes. The so-called "Trachoma corpuscle" (a) of Greeff. Professor Greeff sent him to Sir Henry Swanzy, who lent him to Dr. Mooney, who brought him here to-night.

Later on we shall have more to say on the subject.

Trachoma is known in practically all countries, it is a scourge in many, and its presence has been recognised from the remotest ages, but it was the devastating epidemics of the latter years of the 18th century, and the beginning of the 19th, that first riveted upon it the attention of the medical profession in Europe.

In 1798 Napoleon landed an army of 32,000 men in Egypt. A very large number of these were attacked by a violent inflammation of the conjunctiva, to which the name "Egyptian ophthalmia" was applied. On their return to Europe they brought the disease with them, and in the period of the Napoleonic wars, when all the armies of Europe were repeatedly in contact, the disease spread with such appalling rapidity that a few years later we find it epidemic in every army in Europe. In the English army, during the year 1818, there were more than 5,000 men on the invalid list, blind from trachoma. In the Prussian army, from 1813 to 1817, over 20,000 men were attacked with this disease. In the Russian army, from 1816 to 1830, 76,811 men were suffering from trachoma. In Belgium, in 1840, one out of every five soldiers was afflicted with trachoma.

These soldiers, invalided home, carried the disease to their families, and spread it through every quarter of their country. Hence trachoma became epidemic in almost every state of Europe. At this stage it became usual to describe it as "military ophthalmia."

Among the civil population trachoma finds a soil suitable for its development wherever many persons are crowded together with imperfect hygienic surroundings. Hence, when in 1841 workhouses became established in Ireland, they formed excellent culture beds and disseminating depôts for the disease, and, in spite of the improved hygienic arrangements, trachoma still flourishes in every union workhouse throughout the land.

It is a remarkable thing that whereas trachoma is a national calamity in Ireland, it is an extremely rare disease in England, and would most assuredly become extinct there but for the influx of infected aliens.

England, as has been said, is a trachoma filter-bed for the United States, and Ireland suffers in the same manner, but the better hygienic conditions prevailing in England have saved it from our fate.

Trachoma is a disease venerable by its antiquity. It is believed to be the disease alluded to in the oldest book on medicine that is known, the Ebers Papyrus.

(a) Presidential Address delivered at the Opening Meeting of the Pathological Section of the Royal Academy of Medicine in Ireland, Nov. 12th, 1909.

(a) Provazek calls them "Clamydozoa" (mantellene, i.e., organisms with mantles). Many writers call them "Provazek bodies."

written in Egypt about 3,400 years ago—i.e., about a thousand years before Hippocrates. Celsus describes the disease, not by name, but in indisputable language. It was well-known among both the ancient Greeks and Romans, as Boldt mentions in his exhaustive work on "Trachoma" (from which, as also from Fuchs and Axenfeld, I have borrowed freely).

It is alluded to in the comedies of Aristophanes, and in a certain Greek play those desirous of avoiding service as marines are represented as pleading ophthalmia as an excuse.

How modern these old Greeks were!

It is stated that Meshullam ben Menachem, in 1481, and Obaja, in 1488, are the first to mention that eye disease was then, as it is still, almost universal in Egypt; but how long before this the disease had become pandemic it is difficult to say.

Trachoma, with us, shows itself under two rather different aspects—

(1) *Papillary trachoma*, characterised by an increase in size of the surface of the hypertrophic conjunctiva, so that it is thrown into folds with deep clefts between: the connective tissue forming the papilla is stuffed full of round cells; and

(2) *Follicular trachoma*, characterised by the presence of the true trachoma bodies, which are rounded accumulations of cells, between which a very delicate connective tissue framework can be made out. The cells in the marginal portions of the granulations are lymphocytes; in its anterior parts are predominantly uninuclear leucocytes (epithelioid cells), between which lie a few particularly large cells (phagocytes), which contain in their protoplasm small, deeply-staining corpuscles (Fuchs).

There are certain points that may be worth bearing in mind by anyone about to undertake an investigation into the cause, the intimate specific cause, of trachoma.

Amongst the lower animals monkeys are said to be the only ones affected with trachoma.

The conjunctiva and lachrymal sac are the only mucous surfaces affected with the trachomatous type of inflammation.

Trachoma cases are nearly always complicated by the presence of some one or more of the well-known pathogenic organisms, which must be regarded as a complication, and not the cause of the condition, a mixed infection being almost the rule, the most important complicating organisms being the Koch-Weeks bacillus and the gonococcus.

The history of the earlier epidemics, and the frequent presence of the gonococcus, has led some to hold that trachoma arose originally from the action of the gonococcus. Indeed, so lately as 1905, Bishop Harman writes:—

"The conclusion I am driven to, after examining all the evidence at my disposal, is that, so far as microbic influences can be determined, the trachoma of our time is probably the result of an inoculation of the conjunctiva with the micrococcus gonorrhœa of an attenuated virulence, the effects of the inoculation being so mild that they are not noticed; consequently, in England we never obtain definite evidence of the organism, the case being seen too late."

Trachoma is essentially a chronic disease. Acute trachoma is a disease which begins acutely with profuse secretion, and in the majority of cases is not a pure trachoma, but a mixed infection with an acute catarrh.

Perhaps the most perplexing fact in connection with the subject of the contagiousness of trachoma is the unilaterality which is now and then observed.

I have several times found a typical trachoma of several years' standing in one eye, whilst in the other eye of the same individual no trace of disease, past or present, could be seen.

No satisfactory theory has, so far, been put forward to explain this anomaly.

It is impossible to suppose that direct local infection had not taken place during those years, and such explanations as "local immunity" are mere words, and do not help us.

The infectiveness of trachoma is greatly increased during the acute exacerbations caused by the presence of other organisms, such as the Koch-Weeks bacillus

and the gonococcus, the diplo-bacillus of Morax-Axenfeld, or the pneumococcus.

Simple chronic granular ophthalmia possesses but a low degree of infectiveness, but predisposes the conjunctiva to the attacks of other micro-organisms, whose activities at once raise the infectiveness of the trachoma virus.

Drying of the conjunctival secretion seems entirely to destroy the infectiveness of the trachoma virus.

No life period is proof against trachoma.

Acquired immunity cannot be demonstrated.

The influence of personal disposition cannot be denied.

The influence of race predisposition is doubtful.

The influence of environment is all important.

Trachoma has never been produced by inoculation with pure cultures of any known micro-organism, though it has, from time to time, been stated to be caused by—

(1) The gonococcus, as mentioned before

(2) The Koch-Weeks bacillus (Gromakowski).

(3) Micro-organisms, designated "trachoma cocci," have been found by Michel, Sattler, and many others, but Axenfeld says they are not constant, and are not the cause of the condition.

(4) Bacillus Xerosis (Shongolowicz).

(5) "Microsporon trachomatousum," a fungus which Noiczewski thought he found.

(6) Ultra-microscopical bodies are described by Raehlmann and Santucci, but their causative power requires proof.

(7) L. Muller has found a small bacillus—like the influenza bacillus, but it is not constant, and is not the cause of trachoma.

Everything is in favour of trachoma being a specific infectious disease, the cause of which is not yet definitely determined; but, as I mentioned before, there is now another prisoner in the dock—the organism discovered almost simultaneously by Professor Greeff in Germany, and by Halberstädter and Prowazek in Java, and verified by Mijaschita in Japan, and by others in different countries.

At the Ophthalmological Congress, in Oxford, in July last, and subsequently in Belfast, Professor Greeff demonstrated the organism which he regards as the cause of trachoma. He says:—"The bodies I found were very regular, round, cellular inclusions, which were much smaller than the smallest known coccus. They stain intensively, sometimes violet, sometimes reddish or blue, with Giemsa diluted with aniline stains, and not at all with Gram. They are surrounded by a distinct, clear zone. With the strongest powers of the microscope, one observes that they are not quite round, but a little oval, like bacteria with rounded extremities. Finally, they are isolated, or grouped in pairs or in masses. If intracellular they lie close to the nucleus. We found the formations in the epithelial cells, in the discharge, in the pressed-out follicles, and, indeed, everywhere they were looked for."

The bodies can also be seen in sections "in the sub-epithelial tissue, in the lymph spaces beneath it, in the cells of the follicles (the lymphoid and the so-called Leber's cells), and between the cells."

Greeff states that these bodies are a constant characteristic of trachoma, as he has found them in every recent case of trachoma (not under treatment), and, further, that he failed to find them in any other form of conjunctivitis.

Caustic applied to the conjunctiva makes them vanish for the time, but they recur. These bodies invade the cell, increase in number, and congregate in a mass close to the nucleus, multiply till they fill the cell, and finally burst free into the tissues.

"It would as yet," he says, "be premature to attempt to assign to the trachoma bodies their place in the zoological system. They are certainly not bacteria; on the contrary, they are more closely allied to the protozoa." (a)

In these disjointed remarks I have brought forward nothing original, I have stated nothing new. My object has been to attempt very briefly to recapitulate some

(a) A cell with a mass of these in it was on view under the microscope.

of the results of the last twenty years' work on this subject, in the hope that it may serve to stimulate some of the younger men here to undertake the task of verification, and by original work to throw light upon these dark places.

Are these organisms really the cause of trachoma? That is the great question of the hour. It may be easy to demonstrate their specific nature, but their parasitic and causative nature is quite another question.

We have so often been disappointed in the past that it behoves us to accept with caution all statements, and test for ourselves the facts. At present our only verdict can be, "Not proven."

I know the subject is difficult, but if it were not difficult neither would it be interesting. I know that it is not easy to get the time and the energy to carry on any extra work for, as the great Samuel Johnson said, "What we think of importance we wish to do well; to do anything well requires time, and what requires time commonly finds us too idle or too busy to undertake it."

Through the labours of your predecessors, as I have tried to show, many solid facts have been established; much of the mist and obscurity that surrounded the subject has been cleared away.

But there is plenty of original work still to be done, for, even supposing that the organism under the microscope there is the long-sought microbe, that is only the first step.

Its life history has to be worked out, its origin and its metamorphoses have to be investigated, and its likes and dislikes observed. Not till these have been done can any advantage be obtained from the primary discovery.

The material for such investigations is at your hand. I can give anyone who wants to work as many cases of trachoma as he wishes. Our eye hospitals are full of them, our workhouses are full of them, our blind asylums are full of them, the whole country is full of them—there is no lack of material. Much has been done, but much remains to be done, and this is the place to do it.

In conclusion, I will tell you a story.

Two mice in a pantry were foraging for food. One of them slipped into a jug of cream, and was like to drown. "Keep kicking," cried his friend on the shelf. "But I can't swim," said the one in the jug. "Never mind," said his friend on the shelf, "keep kicking, keep kicking." "What good will that do?" said the half-drowned one in the jug. "Never mind, keep kicking."

In the morning, when the pantry was opened, Mr. Mouse in the jug was found sitting comfortably up on a pat of butter!

My advice to you is "Keep kicking."

## ABDOMINAL HYSTERECTOMY SIXTY-THREE HOURS AFTER LABOUR FOR A NECROSED AND SUPPURATING SUB-PERITONEAL FIBROID. (a)

By PHILIP D. TURNER, M.D.,

Hon. Medical Officer to the Royal Isle of Wight County Hospital;  
Medical Officer of Health for the Borough of Ryde.

Mrs. S., æt. 32. Married 13 months, nullipara, consulted me March 22nd, 1909, on account of a hard lump which she had noticed in the left side of her abdomen for about a fortnight. Her last menstrual period ended on January 18th, and the ordinary symptoms of pregnancy were present.

I found a firm, elongated, freely movable tumour lying on the left side of, and attached to, the uterus, which was about two months pregnant. I considered it to be a pedunculated fibroid, and took her into hospital with the intention of removing it.

On April 8th I opened the abdomen, and found that the fibroid was attached to the uterus by a

very broad base; and I did not consider that it could be removed without terminating the pregnancy, or without considerable risk. As its position on the left angle of the fundus was not likely to allow it to interfere with the course of pregnancy or labour, I decided to let the case go on to term, and perform a myomectomy later on.

Till about the seventh month the pregnancy was normal; but from that time she had pain in the region of the fibroid after any exercise.

Labour commenced on October 26th, but full dilatation was only reached at 9 p.m. on the 29th. Throughout the labour the pain was most severe over the fibroid, which felt harder and tenser than when I had examined it a fortnight before.

The second stage was short and, towards the end, precipitate.

The child—a boy—was born at 11.45 with a very long cord three times round its neck. There was rather sharp post-partum hæmorrhage, and, introducing my hand, I found placenta and membranes adherent, and had to strip them off. In doing so I felt a very small intramural fibroid in the anterior wall, and a somewhat larger sub-mucous one near the right cornu.

The pulse after labour was 86.

On the 31st, in the morning, the pulse was 98, and the temperature 100.2. The tumour was tender and painful. The lochia was scanty and sero-sanguineous.

In the evening she did not feel so well. Temperature 100.4; pulse 106. I ordered a dose of castor oil.

On the morning of November 1st (third day) the bowels had been well opened, but the patient was looking ill and anxious. The region of the tumour was very tender, and the pain in it had kept her awake the greater part of the night. The whole abdomen was somewhat tender, the temperature 100.2, pulse 126.

The lochia were almost absent, represented by a little clear serum only. There was a rather extensive superficial slough on the lower part of the vaginal wall on the left side; this I swabbed with pure carbolic acid.

In view of the steady and progressive rise in the pulse rate, combined with the increasing pain and tenderness over the tumour, I concluded that the fibroid was sloughing, and advised the relations that the patient's only hope of recovery, and that a very slender one, lay in immediate operation.

I operated at 3.15 p.m., 63 hours after the birth of the child, and I removed the uterus by Doyen's method. Some delay and rather free hæmorrhage occurred during the division of the vagina.

Three or four pints of saline solution were introduced into the abdomen, while the wound was being closed. This caused the pulse, which had become imperceptible, to revive, and at the end of the operation, which lasted nearly three-quarters of an hour, it was not much worse than when I began.

An hour later three pints of saline were introduced into the median basilic vein, with one drachm of adrenalin—1 in 1,000 to each pint.

The convalescence was without incident. The pulse for five days did not fall below 120, and was at times as frequent as 140.

The left edge of the abdominal wound sloughed a little owing to interference with its blood supply by the scar of the former operation.

*Description of parts removed.*—The specimen consists of the puerperal uterus with a tumour about the size of the head of a three months' baby, slightly ovoid in shape, which has grown from the left angle of the uterus in front of the broad ligament.

(a) Paper read before the Obstetrical and Gynecological Section of the Royal Society of Medicine, Dec. 9th, 1909.

The round ligament comes over the back of the base of the tumour.

On slitting up the uterus, its cavity is found to run up into a pocket two inches deep on the inner side and to the back of the tumour. There is a small submucous fibroid, the size of a shelled walnut, near the right cornu on the anterior wall. A second, still smaller interstitial fibroid, is situated about the middle of the anterior wall.

The lining membrane is shreddy; but not unhealthy looking. The placental site is on the anterior surface extending to the fundus; but not including the pocket.

On incising the tumour there was a gush of excessively foul and stinking pus. The tumour is almost entirely converted into an irregular cavity lined and trabeculated by yellowish grey opaque slough. This is bounded by a layer of apparently normal fibroid, which on the side nearest to the uterus is three-quarters of an inch thick, while at one point of the incision it is less than one-tenth of an inch, so that the slough is covered by very little more than the peritoneum.

*Remarks.*—This case seems to me one of considerable interest, as an example of one of the accidents which may befall an apparently harmless specimen of fibroid tumour during pregnancy.

I have no doubt whatever that when I opened the abdomen in the third month of pregnancy the fibroid was in a normal condition. On the other hand a mere glance at the condition of the specimen is sufficient to satisfy anyone that the necrotic change must have gone on a considerable time before labour.

The patient began to feel pain in the tumour on exertion about the seventh month of pregnancy; and I imagine that the central necrosis of the fibroid took place about that time, or shortly before.

It is interesting, too, that there should have been no symptoms suggesting any absorption of poison from the tumour till after labour.

A further point of interest lies in the ætiology of the changes in the tumour, which, as I have found so little allusion in the literature to necrosis and suppuration of subperitoneal fibroids, I assume to be a rather rare event. Pregnancy in conjunction with such tumours is comparatively frequent, and does not usually have any untoward effect upon their nutrition. Similar changes in submucous fibroids are usually ascribed to infection; and I should like to hear the opinion of Fellows whose experience is larger than my own, whether the necrosis could have been in any way brought about by the first laparotomy.

The operation was a simple exploratory one. The tumour was examined *in situ* and not brought outside the abdomen. It was exposed to no unnecessary handling. There was no rise of temperature after operation, and the wound healed absolutely by first intention.

Can it be that the ordinary handling of the tumour may so far have damaged the peritoneal surface as to allow infection to occur from the neighbouring bowels? If this were the case the complete absence of any symptoms for four months after infection seems extraordinary.

With regard to the treatment pursued, the only alternative would have been to do a myomectomy or hysterectomy at the first operation. The former would certainly have terminated the pregnancy; and, considering the usually normal course of pregnancy, labour and puerperium in such cases would, I think, have constituted the more serious danger. A fortiori I believe that hysterectomy would have been entirely unjustifiable.

After labour the symptoms did not leave any alternative.

## NOTE ON A CASE OF CYSTIC TUMOUR OF THE RIGHT BROAD LIGAMENT SPRINGING FROM THE UTERUS, AND APPA- RENTLY DEVELOPED FROM GARTNER'S DUCT. (a)

By ARTHUR H. N. LEWERS, M.D.,

Senior Obstetric Physician to the London Hospital.

H. M., a primipara, æt. 47, was admitted into the London Hospital under my care on March 24th, 1909.

*Present illness.*—On admission she complained that for the last month there had been frequency of micturition during the day, and that she had been unable to empty the bladder properly in the morning. For about the same time she had also noticed a swelling in the lower abdomen, and had pain and flatulent distension after meals.

*Physical signs.*—On examining the abdomen a fluctuating tumour was felt rising from the pelvis to a height of one inch above the umbilicus. It was fairly central in position.

On vaginal examination the vaginal position of the cervix could only be reached with difficulty. It lay high up, and to the left. A tense swelling, which seemed to be continuous with the tumour in the abdomen, was felt bulging down the vaginal roof and right lateral fornix.

### OPERATION.

*Operation, March 26th, 1909.*—The abdomen was opened in the usual way, and the cyst, covered by the anterior layer of the right broad ligament, came into view. It was punctured, and about two pints of thick, chocolate-coloured, odourless fluid escaped. The relations of the cyst were carefully examined. The partially collapsed cyst was found to lie in the right broad ligament. It partly overlapped the anterior surface of the uterus, extending in that direction nearly to the middle line. The right tube and ovary were normal, and lay behind the cyst, the posterior peritoneal layer of the broad ligament intervening. The bladder was drawn up, and lay in close relation to part of the anterior surface of the cyst.

In order to facilitate enucleation the collapsed cyst was tightly packed with gauze so as to define its exact limits.

Enucleation was easy in every direction till the right side of the uterus about the level of the internal os was reached.

Here the cyst was firmly attached to the uterus by a pedicle of uterine tissue, about an inch in diameter. This was divided with scissors, and during the process several small loculi the size of a pea were opened. The contents of these looked like thick yellow pus; closer examination showed the material to be inspissated mucus, the cavities in question being lined by a secreting surface. Several large vessels were cut across when dividing the pedicle, and these had to be controlled by under-sewing with silk ligatures. The deeper part of the cyst extended much more deeply downwards than is the case with ordinary broad ligament cysts, and it was in close relation with the vaginal wall on the right side, below the level of the vaginal portion of the cervix, for a distance of at least an inch. Nothing was seen of the right ureter during the enucleation, though it was, of course, looked for. After all the bleeding points had been secured, the edges of the right broad ligament were brought together with sutures, but not so as to make the

(a) Paper read at a meeting of the Obstetrical and Gynecological Section of the Royal Society of Medicine, Dec. 9th, 1909.



cavity, from which the cyst had been removed, watertight.

The left uterine appendages showed signs of chronic inflammation, and were removed. The uterus was retroverted, but was otherwise normal. The patient made an uninterrupted recovery.

The removed cyst, collapsed and shrunken after immersion in 5 per cent. formalin, measures 6 by 4 inches, but in the recent state was the size of an adult head.

On the outer surface of the cyst are seen two smooth bosses, the size of marbles. There are two small cystic cavities not communicating with the main cyst; one of them has been laid open, and a section taken through its wall. The other remains intact.

The microscopic examination supports the view that the tumour represents a collection of dilated ducts and cysts in the uterine wall, probably arising from the intra-uterine portion of the Gartnerian duct.

### ON SOME RECENT ADVANCES IN BACTERIOLOGY. (a)

By CARSTAIRS C. DOUGLAS, M.D., D.Sc.,  
C.M. EDIN.,

Lecturer on Public Health, Anderson's College Medical School,  
Glasgow.

DR. DOUGLAS commenced his lecture by giving a *résumé* of the different dates at which the various known organisms of disease were discovered, and that very great strides had been made in the discovery of these organisms in the last twenty years, and which could not advance at the same ratio in the present decade. About 90 per cent. of the effects of specific disease are due not to the organisms but to their toxins, and if long enough time be given, we find that Nature produces the antidote to these organisms and their toxins. We do not attack the symptoms of these diseases, but endeavour, by the aid of rest, nourishing diet, fresh air, attention to the skin, etc., to uphold the strength of the patient and so tide our patient over the dangerous period of the disease.

In speaking of the *habitat* of various organisms Dr. Douglas took as his type the pneumococcus and stated that 20 years ago it was regarded as essentially in croupous or lobar pneumonia, and it was believed, for a long time, that the pneumococcus found a home only in the pulmonary alveoli, but since then it has been found to have a wider extension, such as the bronchial and nasal secretion, and it may attack any tissue or organ and produce such diseases as pleurisy, endocarditis, otitis media, etc., and Parke and Williams, of New York, in 80 patients found the pneumococcus present in the bronchi of 40 of these who were apparently healthy individuals. Dr. Douglas stated that the pneumococcus is practically always in the blood in pneumonia, and in a fair number of cases it is possible to get clumping, just as in typhoid, but it is not so marked as typhoid, and usually occurs about the crisis. The chief organisms against which the clumping or agglutinating test may be, with a reasonable amount of success, attempted, are Malta fever, which is now a somewhat rare disease, typhoid, bacilli coli, diphtheria, human glanders, pneumonia, dysentery, ptomaines, specially if Gartner's bacillus, and whooping-cough.

The lecturer stated that the bacillus typhosis occurs very early in the blood, in 90 per cent. of cases within the first week, and related several cases of chronic typhoid carriers disseminating the disease years after their own recovery, and laid

particular stress on the point that they were not constant carriers but only intermittent. With regard to water Dr. Douglas states that when water has become affected with the typhoid bacilli that it entirely disappears from this same water in 5-7 days, and that the bacillus lives longer in sterilised or Pasteurised milk than it lives in ordinary milk. He maintained that it is the moist spray which is ejected from the mouth of a tubercular subject, that is the source of infection, and not to such a great extent by the sputum which has become dry and floats about. This he proved by keeping a guinea pig within the sneezing zone of the patient, but not in contact with him, and which afterwards developed tuberculosis. The lecturer also believes that tubercle is a disease which is ingested rather than swallowed, as accumulated evidence shows that the tubercular bacilli can find its way through the undamaged epithelium of the intestine, and the mesenteric glands of the child are far more frequently attacked than the bronchial glands. The lactic acid (sourine) treatment of tuberculosis is still *sub judice*.

Dr. Douglas discussed the Wasserman reaction for syphilis, and explained that it entailed the fixation of the complement and was based on Ehrlich's side chain theory. To illustrate what really happened Dr. Douglas made use of an ingenious model, on which he was able to demonstrate the part played by the spirochæta (or other organisms), side chains, immune body, and complement respectively, and which appealed far more to the practitioner than any amount of theory or book knowledge. Having described in detail how to perform the whole reaction the lecturer concluded by stating that it is not strictly accurate as the ordinary liver cell has given the reaction, and that the general practitioner requires something easier and less expensive.

### SOME PROBLEMS RELATING TO THE EVOLUTION OF THE BRAIN. (a)

By DR. G. ELLIOT SMITH, F.R.S.,

Professor of Anatomy at Manchester University.

THE lecturer first dealt with the historical development of the foundations of our modern knowledge of that particular part of the brain, the activities of which are concerned with mental phenomena. He pointed out the appropriateness of the Royal College of Surgeons as the place for discussing this subject, seeing that all our recent accurate knowledge of this part of the brain is based upon the work which has been carried on in the College museum during the last seventy years by its officers and by students, who drew their inspiration either directly or indirectly from the work done there. He described the early work of Sir Richard Owen on the brain of marsupials in 1836, and the eclipse of Owen's work in the disputes which followed on the publication of Charles Darwin's "Origin of Species," when the feeling of animosity against Owen by Darwin's champions was raised to such a pitch that the latter failed to discriminate between the good and bad in Owen's work. But the overthrow of Owen's excellent work on the marsupial brain was only temporary. After being discredited for a quarter of a century, it has been confirmed by recent research with modern methods, and has become the foundation of our present knowledge of the morphology of the brain in the vertebrata.

The lecturer described the chief stages in the evolution of the cerebral cortex, with the object of explaining the origin of the "neopallium"—the

(a) Abstract of Lecture delivered before the Glasgow Northern Medical Society, Dec. 7th, 1909.

(a) Abstract of a series of three Arris and Gale Lectures delivered at the Royal College of Surgeons of England last week.

name given by him to that part of the brain which, far more than any other, is responsible for the occurrence of mental phenomena. It is a part of the nervous system where sensory impressions of all kinds, tactile, visual, acoustic, olfactory, gustatory, &c., may meet and blend and arouse the memories of former sensations; thus it is the organ in which are born the consciousness of things present, the memories of things past; and all the higher psychical phenomena which result from the exercise of an associative memory. This organ only becomes developed in any definite form in the mammalia, although feeble attempts at the formation of an analogous structure are discernible in reptiles, and more distinctly in birds, whose brains, like their psychical potentialities, develop along highly-specialised and peculiar lines.

Professor Smith is of opinion that the neopallium probably originates in the immediate ancestors of the mammalia, when the skin over the whole surface of the body becomes transformed into a highly-developed tactile organ. Even in reptiles, and to a much greater degree in birds, impressions of touch coming from the tongue and the skin around the mouth make their way into the cerebral cortex. In these creatures also the cerebrum concerns itself with the consciousness of sight. But in the mammal sensory paths pour into this part of the brain in infinitely larger numbers, not only from these two or three special sense-organs, but from every sensitive surface in the body, and especially from the organs of touch scattered throughout the extensive area of the skin. Thus the cerebral cortex, which in the lower vertebrates was little more than a receiving instrument for impressions of smell, and perhaps taste, becomes in the mammal a place where every kind of sensation can blend, and not only awaken a consciousness of all the various properties of an object, as they appeal to the senses of smell, taste, sight, hearing and touch, but also an organ where such states of consciousness can leave impressions to be stored up and used for the purpose of interpreting present sensations in the light of past experience. The neopallium is the part of the cortex which subserves this function of associative memory, which lies at the root of all mental phenomena.

In the lowlier vertebrates, Professor Smith thinks that the nervous system may be likened to a confederation of more or less autonomous States; the cerebrum belongs mainly to the sensé of mell, and, perhaps, taste also, and, while contributing its quota to the control of the commonwealth, it is itself influenced only slightly by the other sensory mechanisms. The part of the nervous system which receives impressions of sight is the mid-brain, and in the lowliest vertebrata this plays a far more important rôle than the cerebrum. Other senses are represented in other parts of the brain, none of which, however, can be said to exercise a dominating influence over the rest, such as the cerebrum has in mammals. A lowly vertebrate, such, for example, as a fish, may see an object and recognise it as being desirable or undesirable; but the state of consciousness thus aroused is not greatly influenced by information obtained by other senses, such, for example, as smell and touch. Thus a fish readily mistakes an imitation fly for the real insect, and may not recognise food which is just as nutritious and appropriate as the fly, simply because it does not look like a fly. A frog or lizard may be disturbed by the sound of the gentlest splashing of water or rustling of a leaf, and yet remain undisturbed by the loudest noises made in close proximity to them. The organs of special sense in animals without a neopallium respond only to appropriate stimuli—only to those impressions which in the

course of evolution have come to possess some precise meaning for them. "As Professor Edinger has well said," remarked the lecturer, "a loud noise conveys no more definite sense of danger to a lizard than a warning notice on the edge of a precipice written in Chinese would have to the European." The neopallium, in other words, is a mechanism which enables its possessor not only to appreciate all the properties of any given object; it does far more than that; it enables him to correlate, to test and to judge present impressions with memories of past sensations and past states of consciousness which have been "stored up" in the great treasure-house of memories—the neopallium. The neopallium is first definitely recognisable as such in mammals, and at its first appearance it can already be mapped out into a series of areas, each of which is being cultivated by some particular sense. We have a storehouse for impressions of sight, another of taste, another for touch, and so on.

The further evolution of the cerebral cortex is brought about by the development between these sensory areas of new regions in which the impressions of the various senses meet and form the basis for still higher psychical activities than those of mere associative memory.

## OPERATING THEATRES

### ROYAL FREE HOSPITAL.

OPERATION FOR EPITHELIOMA OF THE TONGUE.—Mr. LEGG operated on a man, æt. 63, who six months previously noticed a small pimple on the posterior part of the right side of the tongue. For the last two months he had had occasional pain shooting towards the right ear. Six weeks ago the patient first noticed a lump on the right side of the upper part of the neck just behind the angle of the jaw. On examination a small ulcer was found just where the anterior pillar of the fauces and the dorsum of the tongue adjoin. The ulcer extended a short way above the former structure, and it had a hard, irregular edge. In the tongue, extending forwards to about its middle on the right side, a hard mass was found, and the movements of the tongue were somewhat limited. The lymphatic glands beneath the upper part of the right sterno-mastoid were enlarged, hard, and somewhat fixed, though not completely immovable. The lower limit of this mass was on a level with the hyoid bone; no other enlarged glands could be detected. In all other respects the patient was a well-preserved and healthy man for his years.

At the operation the glands were first removed through an incision extending from just above the angle of the jaw nearly as low down as the clavicle. From the middle of this incision a second curved one was made across the neck to the middle line, and the two flaps of skin and platysma so marked out were turned upwards and downwards respectively. All the fascia covering the muscles, and all the fat and connective tissue in the anterior triangle were removed, together with the submaxillary salivary glands. The jugular vein was exposed at the lower part of the neck, and tied in two places, then divided between two ligatures. Then a portion of the sterno-mastoid and all the fat and connective tissue beneath it in the upper part of the posterior triangle of the neck was dissected upwards and forwards. The glands were detached from the parotid by dissecting upwards to the base of the skull. The upper end of the jugular vein was isolated, tied, and divided between two ligatures. The mass of glands was then separated from the deep muscles and removed in one mass together with the jugular vein, the fat, and the fascia of the two triangles. It was necessary to remove also the posterior belly of the digastric and a portion of the spinal accessory nerve, as the glands were inti-

mately adherent to these structures. The lingual artery was next exposed at its origin from the external carotid and ligated about half-an-inch from the latter vessel. The lower part of the incision along the anterior border of the sterno-mastoid was now stitched together, and the remainder of the wound covered with sterilised gauze wrung out of 1 in 2,000 perchloride of mercury lotion. The mouth having been opened widely by a gag, the right cheek was split for a distance of two inches from the angle of the mouth. The ulcer could now be clearly seen, and its limits more carefully defined. A stout silk thread was passed through the left of the tongue at its posterior end; a similar suture was also put in the right half of the tongue. The mucous membrane of the dorsum was divided in the middle line. A pair of scissors then were used to cut through the soft palate close to the right margin of the uvula. All the posterior part of the soft palate was removed, together with the anterior pillar of the fauces and a part of the lateral pharyngeal wall. On the outer side the mucous membrane covering the median aspect of the alveolus was divided close to the last molar tooth. The mucous membrane of the floor of the mouth and the frænum linguæ were then divided, the incision being deepened so as to cut through the whole thickness of the floor of the mouth. The right and left halves of the tongue were next separated by scissors, and, by pulling on the silk sutures before mentioned, the affected half of the tongue was pulled upwards and forwards to such an extent that it was easy to divide the attachment of the tongue muscles close to the hyoid bone, and well behind the margin of the ulcer; thus the tongue, the floor of the mouth, and a portion of the palate were removed in one mass. The cut edges of the mucous membrane were approximated as closely as possible by interrupted sutures, especial care being taken to close the gap in the right half of the soft palate by passing the stitches deeply into the underlying muscles of this structure and those on the inner aspect of the ascending ramus of the jaw. Two drainage tubes were placed in the neck, one behind the sterno-mastoid, and the other at the lower end of the incision. The upper part of the wound in the neck was left widely open, one or two stitches being put in at the anterior and posterior ends; the remainder was lightly packed with gauze.

Mr. Legg remarked that in this patient the ulcer was in an unusual position, and he pointed out that it was the glandular enlargement which suggested to the patient the necessity of seeking advice. This is a not uncommon event, and so long as the ulcer or growth on the tongue does not cause inconvenience, it is very likely to be neglected, and the favourable time for operation passes. The patient often complains, as this one did, merely of the lump in the neck, and in all cases of glandular enlargement a very careful search for the primary focus of the disease must be made. This may be quite small—that is to say, the amount of ulceration may be slight, yet around the ulcer and in the substance of the tongue or wherever the growth is, there may be present a large indurated swelling. A good light, and the use of retractors for the cheek, and a tongue depressor, enables one to see the growth, which otherwise is invisible. A laryngoscope mirror is very useful in examining the back of the tongue. As regards the operation, Mr. Legg pointed out that the main thing to do was to remove the growth and glands as freely as possible; hence a good exposure of the parts was necessary, and he thought that splitting the cheek was very helpful when the growth was far back. The amount of deformity was very slight if care were taken to sew up the incision accurately, especially at the angle of the mouth. The incision must be made below the line of Stensen's duct, which should not be injured. In the removal of the tongue it was important to cut the muscles close to the hyoid bone, which could be satisfactorily done in the manner described, and when the growth encroached upon the floor of the mouth the muscles forming the latter structure must be removed. Of course, this leaves a large

wound communicating with the neck, and as there is always a certain amount of septic infection following these operations, the incisions in the neck must not be sewn up, at least in the upper part. If they are left open the large cavity granulates, and in the course of four or five weeks—sometimes sooner—it is completely closed. The amount of scarring in the neck is not greatly increased, and it is often difficult to say that the incision had not healed by primary union. Drainage tubes should always be placed in the dependent parts of the wound, for a few days at least. They may be removed in many cases on the fourth or fifth day.

The glands, and all the fascia covering the muscles, should be removed in one mass, and whenever they are adherent to the jugular vein this structure should be removed along with them. It is an unusual thing to find the glands adherent to the vein whilst the carotid vessels are free. Recurrence is most likely to take place in the glands at the upper end of the jugular vein, and hence especial care must be taken to remove these, which are close to the base of the skull, and beneath the upper end of the sterno-mastoid muscle.

Another point worthy of attention was the position in which the lingual artery was ligated—namely, a short distance from its origin. This was chosen because it was desirable to cut off the whole of the blood supply to the affected half of the tongue, which was to be removed close to the hyoid bone; so that the removal of the tongue is practically bloodless, and there is little risk of blood trickling into the larynx and lower air passages. When the lingual is tied in the usual place beneath the hyo-glossus, the dorsalis linguæ branch is not controlled, and much more bleeding from the tongue occurs. It has been said that ligature of the lingual so close to its origin is likely to be followed by secondary hæmorrhage. This had not been Mr. Legg's experience, and he thought the explanation lay in the fact that, by leaving the upper part of the neck wound widely opened, free exit for the discharges was provided, and any considerable septic infection of the neck wound was unlikely. In fact, the lower portions of the wound usually were healed in a week or ten days, and the upper portion was covered by healthy granulations. Ligature of the lingual artery in this situation also obviated the necessity of performing tracheotomy or laryngotomy, and the plugging of the upper opening of the larynx during the removal of the tongue.

Feeding of the patient was carried out through a nasal or œsophageal tube three or four times in the 24 hours, and the mouth was irrigated with 1 in 80 carbolic acid lotion.

The patient made an uninterrupted recovery.

## TRANSACTIONS OF SOCIETIES.

### ROYAL SOCIETY OF MEDICINE.

#### OBSTETRICAL AND GYNÆCOLOGICAL SECTION.

MEETING HELD THURSDAY, DECEMBER 9TH, 1909.

The President, Dr. H. MACNAUGHTON-JONES, in the Chair.

DR. PHILIP D. TURNER, of Ryde, read a paper on ABDOMINAL HYSTERECTOMY SIXTY-THREE HOURS AFTER LABOUR FOR A NECROSSED AND SUPPURATING SUB-PERITONEAL FIBROID,

which will be found on page 658 under the heading of "Original Papers."

In the discussion of Dr. Turner's paper, Dr. LEWERS said that where acute symptoms arose after labour complicated by the presence of uterine fibroids, it was only in exceptional cases, such as the present, that hysterectomy was required. He referred to a case of labour at the eighth month complicated by fibroids he had recorded in which the patient had a rigor and high temperature a few hours before labour, and the temperature remained more or less high for

7½ weeks after delivery. Then a fibroid, the size of the fist, was expelled from the uterus with 15 oz. of extremely fetid pus, the patient making a good recovery. This patient was extremely anxious to have a living child, and unfortunately the child on the occasion referred to was stillborn. She was now pregnant again, and about to be re-admitted into the London Hospital for her confinement. There were still other fibroids in the uterine wall. When she was acutely ill after the last confinement, he had several times considered the question of hysterectomy, but had decided to defer it as long as possible, and the event had justified the expectant treatment adopted.

Mrs. BOYD thought that cases reported to the Section on previous occasions did not bear out the view that abortion would certainly have followed myomectomy.

Dr. HERBERT SPENCER congratulated the author on his successful treatment of the case. To have removed the tumour during pregnancy would have entailed great risk of abortion, and would have left behind a sub-mucous tumour much more likely to cause trouble than the sub-peritoneal growth, suppuration in which was a very rare occurrence. It had been happily dealt with by Doyen's total hysterectomy, which presented great advantages in these puerperal cases. He thought the suppuration occurred as the result of infection in removing the adherent placenta; no doubt the tumour had previously undergone necrobiosis. There was evidence of infection in the slough in the vagina, and a section of the small sub-mucous myoma at the fundus showed it to be deeply congested and inflamed.

Dr. TATE referred to a case of suppuration in a uterine fibroid, clearly due to infection at the time of delivery, which he operated on in October, 1906. Seven months previous to the operation the patient had a stillborn child at the eighth month. Subsequently a parametric abscess formed, and burst into the vagina. The patient continued to have a hectic temperature and steadily lost flesh. The fibroid tumour, which was of small size at the time of the confinement, steadily increased in size and was very tender. At the time of the operation abdominal hysterectomy was performed, the tumour being as large as a seven months pregnancy, and on incising it after removal three and a half-pints of stinking pus were evacuated, with a large sloughing mass of fibroid in the centre.

The PRESIDENT said there were two important questions raised in this case.

First, was the course pursued in the early period of the pregnancy the right one, and justified by the exploration of the tumour? Secondly, was the total hysterectomy called for under the conditions present after the labour? On both these points he was quite in accord with the treatment pursued.

The ample discussion which they had had during the last session in the Section showed that the plan of non-interference in similar growths during pregnancy was by far the wisest and safest for the woman and child. He also felt that the subsequent radical step taken, in face of the infective signs and symptoms, was the only course open to Dr. Turner. As to the examination of the tumour for the presence of pus—the stench disclosed at the time was to him (the President) sufficient evidence of the septic and infective nature of the tumour.

In reply, Dr. TURNER said that he did not think that there was any possibility of the patient's recovery by natural means. In reply to Dr. Routh, he agreed that infection at the time of labour might account for the acute symptoms: but that the necrosis and breaking down of the slough must have occurred during pregnancy; as such extensive and advanced changes could not have occurred within sixty-three hours. In reply to Dr. Stevens' doubt as to the fact of suppuration he could only say that the fluid was dirty yellow in colour, and had an excessively foul odour. In reply to Mrs. Boyd he said that his statement that myomectomy would inevitably have produced abortion was perhaps too absolute: but that the risk was certainly greater than he would have been justified in undertaking.

The discussion on Dr. Turner's paper was followed by a short paper on a case of

CYSTIC TUMOUR OF THE RIGHT BROAD LIGAMENT SPRINGING FROM THE UTERUS, AND APPARENTLY DEVELOPED FROM GARTNER'S DUCT,

by ARTHUR H. N. LEWERS, which will be found on page 659 under the heading of "Original Papers."

In the discussion that followed Mr. ALBAN DORAN referred to Unterberger's remarkable instance of a bilobed cyst of the right Gartner's duct, in which there were apparently two cysts, and on pressure on the left tumour sanious watery fluid issued from the os externum. The tumour was so intimately connected with the supra-vaginal part of the cervix that the uterus was removed as well. On dissection, however, it was found that the right one of the two cysts had a well-formed duct which ran through the wall of the cervix opening into its canal, whilst the left one also had a duct, but it opened into the right duct passing behind the cervix. In this case the ducts were saved, but unfortunately the patient was lost; in Dr. Lewer's case the patient recovered, but the cyst had been dissected off the uterus, and the ducts were therefore cut through. But in Unterberger's case there was long-standing infection before operation, the contents of the cysts being fetid, and in that exhibited this evening there could be little doubt that it was homologous to Unterberger's tumour.

Dr. AMAND ROUTH alluded to five cases of cysts developed from Gartner's ducts, which he had described in a paper read before the Obstetrical Society in 1894. (*Obst. Soc. Trans.*, Vol. XXXVI., 1894, p. 152.) His own case and those of Watts and Veit were cases of communicating vaginal and broad ligament cysts. In another, Milton's, Gartner's duct opened on to the antero-lateral wall of the vagina, and in Lawson Tait's case, both Gartner's ducts opened out in the vestibule on either side of the urethral orifice. In the latter cases probes could be passed into the broad ligament regions. He knew of no means of deciding whether a parovarian cyst was developed from Gartner's duct or from one of the vertical tubules of the parovarium, except from the way that the former tended to burrow also along the antero-lateral wall of the vagina. He asked for more evidence that Gartner's duct habitually entered the uterine substance.

Dr. DRUMMOND MAXWELL said that as Registrar to the Hospital, he had had the opportunity of examining the tumour, which at first sight had appeared to be an intra-ligamentous, fibroid undergoing cystic degeneration. It was only when sections were taken from its walls that its interesting origin was suspected, and he thought the evidence of the accompanying microscopic sections warranted the view that the tumour was of developmental origin, and arose in the intra-uterine portion of Gartner's duct.

Dr. BOYD was interested in the observation that the ureter was not seen. In a similar case of tumour, where a large cyst presented in the abdomen and burrowed deeply into the recto-vaginal septum down to the pelvic floor, wrapping the uterus round so that it appeared both in the anterior and posterior vaginal vaults, the ureter was stretched out over the outer abdominal surface of the cyst.

Dr. LEWERS thanked Mr. Doran for giving him the reference to Unterberger's case. It seemed to be a similar one to that recorded in his own paper. Unfortunately, Unterberger's case had ended fatally, and this seemed probably to have been due to his attacking the tumour from below first ineffectually, and later on having to deal with the tumour from above. Dr. Lewers thought it best to remove tumours of the kind by the abdominal route, as he had done in his own case. With reference to Dr. Routh's remarks, Dr. Lewers did not think he had quite appreciated the facts that the wall of the cyst was formed of uterine tissue, that it was connected by a stout pedicle of uterine tissue to the uterus at the level of the internal os, and that the small secondary cysts in the wall of the main cyst were lined by columnar epithelium.

Dr. HENRY ROSCOE, one of the best-known medical practitioners in North Staffordshire, died under tragic circumstances at Stoke on December 17th.

## ROYAL ACADEMY OF MEDICINE IN IRELAND.

## SECTION OF MEDICINE.

MEETING HELD FRIDAY, NOVEMBER 26TH, 1909.

The President, WALTER G. SMITH, M.D., in the Chair.

## SPLENO-MEDULLARY LEUKÆMIA TREATED BY X-RAYS.

DR. MAURICE R. J. HAYES read a paper on above. Female, æt. 42, married; no children. Symptoms directly referable to her disease began in August, 1906, but the enlargement of her spleen was first apparent in December, 1908. In February, 1909, when X-ray treatment was commenced, she was very anæmic and wasted; she suffered much from breathlessness and palpitation, her legs were swollen, and she had hæmic murmurs. Her spleen extended for two inches to right of middle line, for three inches below umbilicus, and to the level of crest of left ilium. Liver slightly enlarged; no enlarged lymph glands. For purposes of irradiation the superficial area of the spleen was divided into four circular areas, ten centimetres in diameter, and each one was exposed in turn, a hard tube being used. The average duration of each exposure was eighteen and a half minutes. From February 20th to November 25th, 1909, twenty-two exposures were given. She had no treatment during July, August, September, and October, when she felt very much improved, and was able to perform her household duties. Her spleen had reduced in size till it was palpable for two and a half inches below the left costal arch, and it was freely movable. Palpitation, breathlessness and œdema had disappeared, and she looked very well—anæmia better. In the end of October her symptoms returned and X-ray treatment was resumed in November, to which she is responding. She has had no medicinal treatment whatever for her disease. She at no time in the course of treatment suffered from any general or local symptoms, which might be referred to the X-ray, save a slight dry dermatitis in April, when irradiation was suspended for three weeks. The reports on the blood-films, which were examined by Professor McWeeney and Dr. W. D. O'Kelly, are as follow:—

Dr. W. D. O'Reilly, are as follow:—					Hæmo- globin per cent.
		Reds.	Whites.	Myelocytes per cent.	
Feb.	15	3,100,000	566,000	20 of whites	60
March	1	—	704,400	—	—
"	23	3,528,000	209,333	10 "	63
April	5	4,368,000	197,000	17 "	58
"	24	2,224,000	172,000	7.3 "	63
June	21	5,072,000	36,000	8 "	75
Nov.	15	3,488,000	168,750	14.3 "	77

The PRESIDENT said that for himself, and he thought he was speaking also for his colleagues, he and they welcomed any treatment, even an empirical one, that promised to be of service in dealing with the disease. They had, however, to take into account the clinical fact that the disease was liable to very curious remissions, which would render the judgment of therapeutic success all the more difficult.

Dr. WATSON said he had treated five or six similar cases, and had generally exposed the spleen in six or seven areas. In his experience the treatment had not shown itself to be of very great value.

Dr. MCWEENEY said he had been immensely surprised, after having seen the state of the woman's blood in February, to see her the other day in such wonderfully good health. He examined her blood and noticed how very well formed the leucocytes were, and he could not find a single normoblast. Whether the change was only the partial recovery that one met with in such cases it was impossible to say. It was essentially a disease of the marrow, and how could they expect to benefit it by radiating the spleen?

Dr. HARVEY said the radiating of the bone-marrow had been discussed and tried, and in no case had it been anything like as successful as radiating the spleen. It had been suggested some years ago that

in the destruction of the lymphocytes and leucocytes which followed the radiating of the spleen there was a leucotoxin set free, which acted on the pathological cells formed. There was no doubt that the X-rays in general had a tendency to destroy cells of a pathological nature rather than normal cells, and it did not seem impossible that, once the process had commenced, bodies might be set free which could continue to have the same action on remote parts of the body.

Dr. BENSON said he had found that by treating the various parts separately dermatitis could be avoided. When a patient came back after a recurrence, it would be found that the tumour receded very much less quickly than on the first occasion, and in a case of long-standing, he had found it impossible to reduce the spleen at all.

Dr. PARSONS quoted a case of his own which was almost identical with Dr. Hayes' case. She was æt. 55, and had had a prolonged course of arsenic without any improvement. The condition of her white cells was almost identical at the end of the treatment with what it had been at the beginning. After the tenth or twelfth application of the X-rays a marked improvement took place in her blood, and the spleen decreased to such an extent that it was almost impossible to palpate it. She went away feeling perfectly well, but returned within a year's time with the spleen increased and a relapse in the condition of the blood. She again received benefit from the rays, but died in six months. It was quite certain that the rays effected a diminution of the spleen, but how it was brought about he did not know. The improvement in the blood was not brought about by the destruction of the white cells, although the rays might inhibit their formation.

Dr. ROWLETTE said he had performed a post-mortem last year on the body of a patient who had died of heart disease while under X-ray treatment. The leukæmia was discovered when she was put to bed in hospital, and as far as it was concerned, she had improved considerably. In the microscopic examination of the spleen he did not find any of the patches which were said to be typical of the disease, and it was possible that the X-rays had caused their disappearance.

Dr. HAYES, in reply, said he believed the woman's present condition to be due altogether to the X-ray treatment. Out of sixty-three cases collected and treated by the rays, only four were alive in from three to six years after the primary symptoms, so that it did not promise very well for the patient.

## SANE HALLUCINATIONS.

Dr. DAWSON read a patient's autograph account of above.

LIVERPOOL MEDICAL INSTITUTION.  
CLINICAL EVENING.

MEETING HELD ON DECEMBER 2ND, 1909.

The President, Mr. T. H. BICKERTON, F.R.C.S., in the Chair.

## DR. N. PERCY MARSH read a paper upon

## MODERN METHODS OF INFANT FEEDING

and introduced the subject by pointing out the importance of maternal nursing as a factor in the reduction of the present high infantile mortality. He then described the differences, both qualitative and quantitative, which exist between human and cow's milk, and the importance of the enzymes in nutrition and the consequent desirability of avoiding their destruction by the employment of sterilisation. He recommended Pasteurisation at 155° F. for the destruction of bacteria, and described Freeman's apparatus which he used for that purpose. He strongly advocated the percentage method of feeding especially in those cases of malnutrition in which the assimilative capacity of the infant had been impaired by previous improper methods. The details of percentage feeding were described firstly, when employed

through the agency of milk laboratories, and secondly the home methods as advocated by Holt in which, by the use of "top milk," containing 10 per cent., or 7 per cent. of fat variations to suit the requirements of any particular case could readily be made.

Cases illustrating the various methods employed were described and in conclusion he stated his belief that percentage feeding was far and away in advance of any method, which he had, in an experience extending over many years, previously adopted.

The paper was discussed by the President, Drs. Heatherley, O. T. Williams, H. Armstrong; and Dr. Marsh replied.

Medical cases were shown by Dr. R. J. M. Buchanan, Dr. A. Gordon Gullan, Dr. Nathan Raw, and Dr. Macalister.

Surgical cases by Mr. F. T. Paul.

Cases of diseases of children were exhibited by Dr. N. Percy Marsh, Dr. de Boinville, Dr. Peter Davidson, and Mr. R. C. Duggan.

Eye cases by Dr. Charles G. Lee, Dr. K. Grossmann, Mr. Edgar Stevenson, and Mr. Hugh E. Jones.

Ear cases by Mr. E. M. Stockdale.

Skin cases by Dr. Frank H. Barendt, Dr. Stopford Taylor, and Dr. R. W. Mackenna. The latter gentlemen also showed the new "Multostat," and demonstrated its uses in the treatment of diseases of the skin.

## CORRESPONDENCE.

### FROM OUR SPECIAL CORRESPONDENTS ABROAD.

#### FRANCE.

Paris, Dec. 19th, 1909.

##### PERU BALSAM.

PERU BALSAM is, by reason of its comparatively high price, frequently adulterated.

Among the substances employed for this reprehensible practice may be mentioned alcohol, turpentine, copaiba, styrax, benzoin, but it is also fabricated by melting benzoin with castor oil.

Peru balsam is rarely employed internally, although its properties are identical with those of tolu balsam. It is reserved for external use, and in divers affections it has a marvellous effect. It is thus that it is used in the healing of contused wounds and torpid ulcers with good results; in the case of ulcers, associated with nitrate of silver, its action is much increased:—

Nitrate of silver, 6 gr.

Peru balsam, 1 dr.

Vaseline, 3 oz.

On the other hand, says Prof. Fleury, those who work in perfumery are well acquainted with the cicatrising properties of Peru balsam. When they cut themselves in the course of their work, it is with this product—used in the business—that they paint the wound, which heals rapidly without suppuration.

Certain practitioners use this drug in the treatment of complicated fractures. Dr. Suter, of Innsbruck, fills the wound with the balsam, and in more than two-thirds of the cases no suppuration was observed. During the Russo-Japanese War the Nippons treated the wounds by Peru balsam, and remarked that cases of tetanus were less frequent.

Besides its antiseptic and cicatrising properties, Peru balsam is an acaricide of great value, and is therefore used more and more for scabies. By rubbing all the body over with a simple pad steeped in the balsam, the acarus is killed in one *stance*, and without the necessity of taking a bath previously. The balsam is removed from the skin the following day by soap and an ordinary bath. Accidents due to absorption of the drug have never been noticed, at least not as regards adults. For children it is more prudent to abstain from using it in the pure state, but the following mixture may be prescribed:—

Peru balsam, 3 dr.

Liq. styrax, 5 dr.

Camphorated oil, 3 oz.

In certain cases, Peru balsam being expensive, and a quantity scarcely inferior to 5 oz. required for the operation, it may be advantageous from an economical point of view to employ a mixture in which the balsam enters for only a third part:—

Prof. Fleury frequently uses the following:—

Peru balsam, 5 dr.

Chloroform, 2 dr.

Vaseline, 2 oz.

WHOOPING-COUGH.

Among the best methods of treating the grave form of whooping-cough, inhalations of oxygen gas may be mentioned.

According to Dr. Weill, of Lyons, these inhalations are to be preferred to antipyrine or morphia, which often fail. They are specially indicated where the paroxysms are particularly grave and the child is threatened with broncho-pneumonia. In order that the inhalations may be efficacious, large doses should be given, from 15 to 20 litres, by means of the ordinary apparatus, the tube of which is attached to an ordinary funnel covering the face. At the slightest symptom of broncho-pneumonia the oxygen must be administered every hour.

The effect of the treatment is a marked attenuation of the violence of the paroxysms, although the number are rarely lessened. Very rapidly the cyanosis and dyspnoea diminish, while the state of prostration and somnolence between the attacks disappear, and anorexia is replaced by an excellent appetite. The children themselves understand the good effects of the inhalations, and ask for them at the moment of the paroxysm.

But one of the most patent and most interesting effects of oxygen is its influence on broncho-pneumonia, which it seems speedily to cut short, asepsifying, so to speak, the lungs.

##### OBSTINATE HÆMORRHAGE.

One of the best methods of treatment of obstinate hæmorrhage due to epistaxis, hæmophilia, hæmoptysis, intestinal hæmorrhage, is that of injecting antidiphtheritic serum once or twice a day in doses of 10 cubic centimetres. The results will be found always very satisfactory.

#### GERMANY.

Berlin, Dec. 19th, 1909.

##### A PROBLEM OF SEX.

At the Medical Society, Hr. P. Marcuse showed a child of six who had been brought up as a girl, but whose sex was now doubtful. The early onset of puberty was remarkable; from her fourth year the voice had become deeper, the pubic hair grew, but the mammae did not develop. Anatomically, the case could be called one of scrotal epispadias. Between two genital folds that might represent either the labia majora or ununited halves of the scrotum, was an erectile structure like the penis, at the root of which was the urethral opening. No trace of labia minora, vagina or uterus, or testicles was to be found. The pelvis was not of the female character, the hair of the head was long, the face not at all characteristic. The child's inclinations were rather those of a boy. Although he inclined to the opinion that the child was a male, he had advised the parents not to take steps to have any alteration made in the register until further observations had been made, regarding possible onset of menstruation, or seminal discharges showed, or evidence appeared of distinct sexual inclinations.

Hr. Gottschalk believed the child was a girl.

Hr. Rothmann advised a thorough examination of the nervous system, in order to determine whether there was any hypertrophy of the epiphyses, as had been suspected in similar cases.

At the Verein für Innere Medizin, Herren Langstein and Niemann discussed the

##### TISSUE CHANGE OF INFANTS DURING THE FIRST FOURTEEN DAYS OF LIFE.

They had determined that during the first few days



of life there was a considerable deficit of N., greatest about the third to the fifth day, and that after this the N. became gradually equalised. There was also an excessive excretion of chlorine and phosphorus in the first few days, and that this excessive excretion gradually declined. They endeavoured to determine whether this was due to the kind of feeding or whether it was physiological. For this purpose, the children were fed with expressed breast milk, but as this was poorer in colostrum than mothers' milk in nitrogen, the question had not been solved.

Hr. Niemann had examined the purin tissue change, in order to determine whether this had anything to do with the deficiency of N. As a matter of fact, the excessive excretion of N. was due to purin tissue change, as the excretion of uric acid in infants was very great during the first few days of life, and especially about the third day, and was a result of the destruction of leucocytes in the blood.

Hr. Rott rather assumed that the loss of weight that took place in new-born infants was due to loss of the watery parts, and caused by a condition of inanition that infants were in during the first few days.

Hr. L. Meyer agreed with Rott that the loss was owing to loss of fluid.

Hr. Gottschalk remarked that it was difficult to determine how much of the calories the new-born infant brought with it. In common with many other obstetricians, he had the child put to the breast at once, but the loss of weight took place just the same. A number of things contributed to this; there was the loss of warmth, the circulation, the digestive activity, and the intense activity of the organism. In his opinion, therefore, the loss of weight depended on other factors than those mentioned by the previous speakers.

Hr. Josef Hirsch drew attention to the weight curves that had been taken in the Israelitish Krankenhaus. Ten curves had been taken, seven of breast children, and three of children fed artificially. In the breast children the loss of weight corresponded to the meconium parted with. In the three others the loss was greater.

#### LUMBAR PUNCTURE IN CONVULSIONS.

Hr. Schiffer had observed the effects of lumbar puncture in four children in convulsions sufficiently well to form an opinion. The first case was one he saw first five years ago. It was a child, *æt.* 4, suffering from epileptic convulsions. These latterly had become almost incessant. The child was livid, and lay quite unconscious; 10 ccm. of fluid were taken away by lumbar puncture. The effect was perfectly striking. The convulsions gradually ceased, and the general condition underwent essential improvement. The second case was that of an idiot, *æt.* 5½, in whom the attacks began three years before, and gradually got worse, until they numbered 8 to 10 a day. The child lay in a perfectly apathetic condition. After the lumbar puncture the attacks became fewer, but returned again. On a second attempt at puncture the needle broke, but the attacks became fewer.

He had also done lumbar puncture not only when the status epilepticus was present, but with a view of reducing the severity of the spasms. He had had beautiful results in four cases (in one puncture was performed four times). In any case lumbar puncture might have a life-saving effect in convulsions, just as venesection in uræmia.

Hr. Eckert spoke of the good effects of lumbar puncture with subsequent sluicing with water in spasmophilia, whooping-cough, and also in eclamptic convulsions without whooping-cough that had been observed in Heubner's wards.

Hr. Cassel had seen two cases in which lumbar puncture was performed. The first case was that of a child of 10 months, with whooping-cough and convulsions, the latter very frequent; 20 ccm. of fluid were withdrawn, sluicing was done, and chloral hydrate given. The next day the attacks had increased to 27, and then ceased. The second case was that of a child of three months, with whooping-cough and convul-

sions. No fluid came away on puncture. The child died soon after from pneumonia.

Hr. Heubner remarked that lumbar puncture had gained new ground in pediatrics as symptomatic treatment in convulsions, where there was no disease of the brain, and also in psychoses without cerebral disease. In one case of meningitis recovery took place after it. It might have been a case of serous meningitis. Lumbar puncture must be made use of symptomatically, as it was not dangerous. Whether its effects were due to release of pressure was still questionable. In the case mentioned by Eckert as ending fatally the autopsy showed excessive hydrocephalus externus.

#### AUSTRIA.

Vienna, Dec. 19th, 1909.

#### CEREBRAL TUMOUR.

At the Gesellschaft f. Innere Medizin, Hochwart and Eiselsberg exhibited a case suffering from Jackson's epilepsy on which they had operated.

The patient, *æt.* 28, had suffered for the last two years from right-sided Jacksonian epilepsy. Since the 28th of November, 1908, the right side of the body has been noticeably weak and atrophic.

The reflex in the right extremities was greatly reduced while decided ataxia was present, with right facial paresis and congestion of the fundus of the eye. He was very irritable and violent, which was quite opposed to his nature before the illness. An area over the left ear was tender on percussion, though this space was no greater than a shilling.

Wassermann's reaction was positive, but a mercurial treatment gave no relief. From this it was concluded that the morbid growth was a gumma or some allied form of tumour.

On the 16th of October it was resolved to operate. After making the part as bloodless as possible by Esmarch's method, a flap was made above the ear, and the cranium entered. On opening the dura mater the surface of the brain was found perfectly healthy and normal in appearance. With the assistance of a feeble faradic current to the motor centres he soon discovered the active centre of the thumb, which happened to be the tender area. Here an incision was made in the surface, but only a centimetre below the knife struck a hard firm body about the size of a walnut, which was removed, and found to contain spindle-shaped cells thus resembling a sarcoma in structure. No drainage was provided for, and the dura mater accurately stitched, the wound was closed.

After the operation the entire right arm was paralysed, the right foot parietic, as well as the right facial nerve. Since that time the paralysis has slightly improved, still, the patient is worse at the present time than before the operation, and further improvement is hardly to be expected.

Teleky agreed with the conclusion of Eiselsberg that little hope of improvement can be held out to the patient now. He related a similar case he operated on for Gussenbaur, the operation did no good, but rather impaired the functions of the patient.

#### CONCRETIO PERICARDII CUM CORDE.

Redtenbacher presented a patient with an enlarged cardiac dulness extending beyond the sternum on the right side and a finger's breadth externally beyond the mammary line on the left and upwards above the third rib. The heart movement caused no displacement, while the sounds were clear though having a pendulum rhythm, but no murmur. The liver and spleen were both enlarged, the pulse rhythmical, though the wave on inspiration was less than in expiration. The conjunctival reaction with tuberculin gave a positive result, which led to the conclusion that the aetiology of the disease was tubercular, probably a tubercular concretion.

#### MYASTHENIA.

Algyogyi next brought forward a female patient, *æt.* 33, who had complained for more than a year of difficulty in deglutition, particularly after hard food that required chewing, as it would regurgitate by the nose in making an effort to swallow. After a short

time the masseter muscles also failed to act, having become tired or exhausted; when the patient had rested a short time she was able to resume her meal with comfort. The muscles of the extremities, the oral muscles, and the eyelids suffered in the same manner, but after a rest she could resume walking and talking as if nothing were the matter. Along with these myasthenic symptoms were also phenomena of hysteria, such as irregularity of the vocal cords, ovarian tenderness, rachialgia, loss of corneal reflex, left-sided hemianæsthesia for touch and pricking.

#### WASSERMANN'S REACTION.

Bauer criticised the value of Wassermann's test as a diagnostic for syphilis. He found that it often failed in undoubted cases of the disease. In visceral cases he admitted that it never failed in his experiments. He always took the blood from a vein, which has the advantage of obtaining the blood before oxidation or depuration commences. In the prognosis of syphilis he found the absence of enlargement of the spleen and galactosuria were favourable indications. In the therapy he specially drew attention to endarteritis luetica, which he thought should be checked at the earliest opportunity, as the valves and coronary vessels soon become involved in the general destruction, while aneurysms were no less important. Muscular injections and inunctions should be frequently repeated, which relieved the angina pectoris that often accompanied vascular changes. With negative Wassermann reactions years after infection with negative symptoms have always a favourable prognosis; but positive reactions with negative physical signs should be a serious warning to the attendant to beware of the future.

#### HUNGARY.

Budapest, Dec. 18th, 1909.

At the recent meeting of the Nagyvarad Medical Society,

Dr. Gross read a paper on

#### CHANGE IN THE AORTA IN SYPHILIS.

He discovered the following changes in several carefully studied cases of syphilis of the aorta. In the first recent case, thickening of the intima, consisting chiefly of spindle-shaped cells, imbedded in homogeneous, intercellular substance was marked. Portions of this thickened intima were made up of mucoid substance, and the superficial layers consisted of thick, hyaline fibres. In the adventitia there was, proliferation of capillaries, whose intima was thickened and adventitia infiltrated with round cells which extended into the media. Four more advanced cases showed cicatrised areas in the media where the muscle bundles were almost completely destroyed. The process in the adventitia no longer progressed and the fibres had become sclerotic. The thickened intima was also cicatrised and replaced by coarse connective-tissue fibres of hyaline appearance. The elastic elements of the aorta were more or less destroyed by breaking up into homogeneous flakes. The difference between syphilitic and ordinary aortitis is only quantitative. The diagnosis of syphilis can only be made, if distinct gummata have developed in the walls of the aorta.

#### ON THE ACTION OF IODIDES IN ARTERIO-SCLEROSIS

Dr. Revix said that although the use of this drug in the treatment of this condition is very extensive yet little is known of its mode of action. He presented the results of a series of observations in young men, otherwise healthy, to whom potassium iodide was administered in daily doses of from 0.3—0.60 grammes, for periods of ten to fourteen days. It has been claimed that this drug has no vaso-dilating action. Examination of the blood from the experimental subjects showed that there was a marked loss of viscosity, sometimes as much as ten per cent. This apparently explains most of the therapeutic effects of the drug, as its action in increasing the fluid character of the blood is equivalent to dilatation of the vessels, for the reason that the stream flows more

rapidly. This also shows that the drug must be continued for long periods in order to produce any effects. The serum does not become fluid to the same degree as the blood *en masse*, and sometimes is even increased in density, so that the change appears to be governed by the behaviour of the cellular elements of the blood alone.

Dr. Raiz read a paper on

#### THE RARER FORMS OF RHEUMATISM.

Some interesting comments were made by him on this subject. He believes that a sharp line must be drawn between muscular and joint rheumatism. To secure uniformity and to avoid confusion, the term muscular rheumatism ought to be dropped (first advised by T. Schreiber) and the word rheumatism applied to that inflammatory condition of the various locomotory organs and their appendages which results from sudden change of temperature. Persons inclined to rheumatism need not, therefore, fear intense uniform cold, but rather overheating, especially that brought about by muscular exertion, followed by sudden rest and cooling. The quickest and most reliable remedy in cases of fresh acute rheumatism, is exercise. The patient may safely indulge in all those movements which cause pain, but care should be taken to exclude joint rheumatism. Chronic rheumatism can only be cured by mechanotherapy in which active and passive movements play an important part. Among the rarer sites for rheumatism which are little mentioned in the literature, are the following: A rheumatic process in the periosteum of the ribs, the sternum, and the long bones; rheumatism of the diaphragm, isolated rheumatism of the coccyx, and the pelvic outlet; and localised rheumatism of the muscles of mastication. Instances of these were mentioned, and good results were secured in all, but that of the diaphragm, by forcible massage. For rheumatism of the diaphragm the faradic current gave some relief. A number of localities were mentioned which are favourite sites of the rheumatic process, mostly muscular attachments.

### FROM OUR SPECIAL CORRESPONDENTS AT HOME.

#### EDINBURGH.

ROYAL COLLEGE OF SURGEONS, EDINBURGH.—The usual annual dinner of the College was held on December 14th, opportunity being taken of the event to inaugurate the magnificent new hall which forms so important a feature of the recent extension of the College premises. Additional interest was lent to the occasion by the presence of Lord Rosebery, who proposed the toast of "The College" in one of his happiest speeches. He spoke of his only qualification for the position of proposer of the toast as being the descendant of Gilbert Primrose, the first recorded Fellow of the College, and brought with him Gilbert Primrose's mortar, which he (the speaker) had received from the town museum of Hawick. It is inscribed "Gilbert Primrose, Chirurgeon, 1569." Gilbert was one of the corps of volunteers enrolled in 1558 to defend the city of Edinburgh against their old enemies, the English, and it is supposed that he lost the mortar on the Borders in the exercise of his volunteering proclivities. A son of Gilbert, Duncan, was one of the surgeons to the Kings of Scotland, and other members of the same family were enrolled in the books of the College. Lord Rosebery then sketched the history of the College during the four centuries of its existence—the early barber-surgeons, with their monopoly of the manufacture of aqua vitæ, their differences with the apothecaries, and with the physicians, their final emergence into the dignity of a Royal College, and their contributions to the advance of surgery and medical education. He recalled that nine years after the reception of their original charter the anguish and disaster of Flodden fell on Scotland, and reflected that in the whole of history there was

nothing more eloquent and courageous than the proclamation of the Edinburgh Town Council after that battle. The news had got abroad in Edinburgh. The magistrates issued a proclamation. It was short and it was simple. It said that rumours were abroad that something had happened to the King and the Army at Flodden. They were not yet authenticated, but in the meantime they summoned every able-bodied citizen by toll of bell and beat of drum to come forward to the defence of the city, and in the meantime, they said, women must not be allowed to wail or weep in the streets. They must go to the churches and pray for the King, for the Army, and for their countrymen who were in the Army. The President of the College, Mr. J. M. Cotterill, in his reply, returning thanks to Lord Rosebery for his very eloquent speech, announced that at a meeting held on December 10th the Right Hon. Lord Rosebery had been elected an honorary Fellow. The secretary then handed Lord Rosebery his diploma, and formally called on him to sign the roll, whereupon the new Fellow was duly robed by the officer. In addition to the loyal and patriotic toasts, the toast list contained "The Houses of Parliament," proposed by the Lord Justice Clerk, and replied to, owing to the absence of Lord Balfour of Burleigh and Sir John Tuke, by Lord Rosebery, who took the opportunity of defending himself from the attacks of both political parties, and asking his critics to judge him by what he actually said, not by snippets of his Glasgow speech. Mr. George Berry proposed "The Universities and Sister Corporations," and was replied to by Principal Macalister and Mr. Lentaigne, President of the Royal College of Surgeons of Ireland.

**RECEPTION BY THE PRESIDENT AND FELLOWS.**—On Wednesday, the 15th, a most successful reception was given by the President and Fellows of the College, which was attended by about 1,200 guests. The arrangements were most excellent, and the new hall and other rooms were much admired. Lord Rosebery lent for exhibition the mortar which he brought to the banquet. Gilbert Primrose was the first known President of the College; he held the chair from 1581 to 1582, and also in 1602. He died at Westminster in 1616, at the age of 80, and it is recorded on his tombstone that "To the end of his life he was chief surgeon to the King, and died adorned with testimonies of public sorrow from Prince and People."

**MEMORIAL TO THE LATE PRINCIPAL CUNNINGHAM.**—To give expression to the feelings of esteem with which the late Professor Cunningham was regarded, a meeting was held on the 15th in the Court-room of Edinburgh University. Sir William Turner occupied the chair, and stated that he had sympathetic answers from the Lord Provost, Sir Donald MacAlister, Professor Reed, Aberdeen, and others. A resolution that some form of memorial be obtained to commemorate Professor Cunningham's work was adopted, being proposed by Mr. J. M. Cotterill, and seconded by Professor Crum Brown. Professor Henry Littlejohn said that Trinity College, Dublin, had decided to erect a medallion, and institute a medal in anatomy. It had been thought that the memorial might be a joint one, and the Dublin promoters offered the artist's drawings and dies for the use of Edinburgh. Professor Lodge and Professor Arthur Thomson moved that a committee be appointed to take the needful steps to carry out the objects of the resolution.

### BELFAST.

**DISCUSSION ON POOR-LAW REFORM.**—An interesting discussion on Poor-law reform and the medical questions involved in it was held on Thursday evening, December 16th, at a meeting of the Belfast Division of the British Medical Association, Dr. Chas. Kevin in the chair. The subject was brought forward in a paper by Dr. Andrew Trimble, who is a member of the Corporation and deeply interested in the question of social reform. He gave a brief sketch of the Report of the Royal Commission, and described the main differences between the majority and minority reports. All agree, he said, that the present system of Poor-law

relief must be abolished, and with it the mixed work-house system must go. But while the reforms proposed by the majority are individualistic, the minority report is markedly socialistic in character, and though he did not agree with all of it, Dr. Trimble thought it was certainly the most thoughtful part of the whole Report, and well deserved careful study. The chief suggestions of the Report were described, and the proposed County medical service discussed. In conclusion, Dr. Trimble asked the question, "Will there be legislation?" Some people, including officials, profess great scepticism in the matter, and say that no Act was ever born of a Report. On the other hand, both political parties are pledged to deal with the question, and the whole trend of public opinion is in favour of sweeping reforms in the present methods of helping the poor and infirm.

Sir John Byers held up the German system as a model, including as it does the three branches of insurance, accident, old age, and invalidity, each scheme having triple support, i.e., from the State, the employers, and the people. His objection to the scheme proposed in the Report was that it merely shifted the responsibility to another Board, and that not a directly elected one. He expressed his conviction that we were on the verge of wide-spreading changes, and said he was surprised that medical men, and especially Irish Dispensary officers, were so little scared by the prospect. One thing he regarded as quite certain, and that was that there would soon be a large increase in taxation.

Dr. John Campbell dwelt on the apathy of the dispensary medical men. Only two were present at that meeting, and it was most difficult to get most of them to take an interest in the matter. He preferred the scheme suggested by the Irish Vice-regal Commission, of a State Medical Service.

Dr. Cecil Shaw agreed with Dr. Campbell about the apathy of the men themselves, and mentioned the difficulty the Irish Committee of the British Medical Association, of which he is chairman, had experienced in getting answers concerning the exact amount of work done, distances covered, etc. Without definite information on such points it was useless to ask for reform, but no one would take the trouble to give it. As regarded a State medical service, it was clear that plan would not obtain much outside support, and the question they would have to answer was whether, failing a State service, they would support the plan of a County service.

Dr. R. M. Fraser expressed anxiety over the future of the dispensary officer, as the Report seemed to him to indicate that all his work would be re-distributed in such a way that no work would be left for him to do.

Dr. Irvine, Mr. R. J. Johnstone, and Dr. Buras also took part in the debate, and Dr. Trimble replied. The whole matter will be further discussed in the Ulster Medical Society, and probably at another meeting of the Division.

**INSANITARY AREAS IN BELFAST.**—At a special meeting of the Corporation held last week, a large improvement scheme was sanctioned, which will do away with the worst slums in the city, and provide sanitary dwellings in their place. The estimated cost of the scheme is £116,000, less estimated value of building ground and rents for buildings to be received, £66,000, making a net cost of £50,000. The scheme is the largest which has been undertaken in Belfast for thirty or forty years, and will be an untold benefit to the city. Incidentally, also, it will give employment to many labouring men for some years to come. As some of the areas are cleared they will be built upon, before others are interfered with, so that there will be no lack of accommodation.

**BABIES' CLUBS.**—At the annual meeting of the Belfast Branch of the Women's Health Association held last week, among other reports of an interesting and encouraging nature, the most so was that on the Babies' Clubs, four of which are now at work in the city. No less than 1,000 babies have become members.

and there is an average weekly attendance of 160. At each visit the baby is weighed, and weight entered upon a card, which the mother keeps. The mothers are encouraged to nurse their children, but if this is impossible they are taught the best methods of artificial feeding, and are supplied at small cost with good milk. Clothes are also supplied at the cost of the material, being made by ladies interested in the Clubs, and advice on health matters is given by the nurses and lady doctors who attend. The results have proved most satisfactory, and it seems that a small outlay in money, though at the cost of much unpaid labour on the part of the ladies interested, a great amount of benefit is being conferred upon the community, to whom healthy citizens are a valuable asset.

## LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

### ALLEGED LIBEL.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—In your report of Dr. Martha Adams' plea for alleged libel, you state that I alluded to doctors as fee hunters, but that I did not go on to explain how it was that they vaccinated their own children. But in cross-examination I am only entitled to answer the questions put to me, and I presume that the Adams' counsel had not sufficient faith in the cow-pox brigade to press the matter further.

On ethics, I merely follow such masters as Schopenhauer, Herbert Spencer, and Jesus (see John vii. 8-10). Schopenhauer restricts the use of falsehood to the single purpose of self-defence, and I take it that saving your child from infection with the syphilitic inoculation, called vaccination, would come under this head. He also states, "the entirely unconditional and unreserved condemnation of lies, as properly involved in their nature, is sufficiently refuted by well-known facts. Thus there are cases where falsehood is a duty, especially for doctors." To my mind, doctors thoroughly, in fact far too thoroughly, appreciate this portion of their duties, but it is difficult in the witness box to discuss a well-known portion of ethics in replies to a hired legal luminary seeking to entangle you. The particular case my statement referred to was that of a parent in poor circumstances, whose child was refused admission into a hospital unless it had been vaccinated. In such a case as that, as I said, I consider an efficient substitute for truth to be perfectly permissible. But when it comes to fee-hunters, I have to decide whether they are too stupid to understand the real nature of cow-pox, or whether the desire for fees prevents them seeing this, and I take the latter view, though there are exceptions.

I am, Sir, yours truly,  
ERNEST POMEROY.

Campden House Chambers, W.

[We insert Mr. Pomeroy's letter, but must say that for his own sake it had better not have been written. The state of mind that persists in regarding syphilitic vaccination and vaccination as synonymous terms, and regards falsehood as excusable under certain circumstances, stands poles asunder from the scientific spirit, which is based upon accuracy and truth. Mr. Pomeroy's position is referred to editorially in the front part of our present issue.—ED., M.P. and C.]

### ON "BADLY-UNITED FRACTURE."

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—In the interesting account of operation for above by Mr. Arbuthnot Lane, the screws used are called Wood's screws, as if designed by someone of that name. This is evidently an error, as the screw is called Wood screw in contradistinction to the Metal screws used for drawing together metal plates, is not pointed like the Wood screws, and quite a different

thread. "Every good surgeon should be a bit of a joiner," as the late Lawson Tait wisely said.

I am, Sir, yours truly,  
ALEXANDER DUKE.

London, W.

### POWERS OF THE GENERAL MEDICAL COUNCIL.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—If your correspondent, a "Poor but Honest Practitioner," had read with any care the charges against the practitioner in the case to which he refers, which are printed in full on page 579 of your issue of December 1st, he would have seen that there was no question of a mere breach of Home Office regulations. It was a very painful case for the Council to have before them, and I imagine no single member gave his vote without deeply regretting the necessity for condemning a brother practitioner who had occupied for so many years an honourable position.

I am, Sir, yours truly,  
A MEMBER OF THE GENERAL MEDICAL COUNCIL.  
December 18th, 1909.

[The letter alluded to was inserted because we thought it right that our correspondent should be permitted to express his general views, which appeared to be, on the whole, sound. He was clearly wrong as to the particular penal case, as shown by the reports of the Council and by the above letter.—ED. M. P. AND C.]

## SPECIAL ARTICLES.

### THE BEIT MEMORIAL FELLOWSHIPS FOR MEDICAL RESEARCH

WE have referred in another column of our present issue to the magnificent legacy by the late Mr. Alfred Beit, supplemented by the additional gift of his brother, Mr. Otto Beit, amounting to £215,000, for the furtherance of medical research in all its branches. Herewith we append particulars of the

#### DEED OF FOUNDATION.

This Indenture and Deed of Foundation made the tenth day of December, 1909, between Otto Beit, of 49 Belgrave Square, London, Esquire (hereinafter called "the Founder"), of the first part, and the Right Honourable Alfred Viscount Milner, G.C.B., G.C.M.G., the Right Honourable George Nathaniel Baron Curzon of Kedleston, G.C.S.I., G.C.I.E., the Right Honourable Richard Burdon Haldane, of 28 Queen Anne's Gate, London, K.C., M.P., the said Otto Beit, James Kingston Fowler, of 35 Clarges Street, Mayfair, London, M.D., and Bouchier Francis Hawksley, of 14 Hyde Park Gardens, London, Gentleman, of the second part.

Whereas the Founder is desirous as a Memorial to his brother, the late Alfred Beit, of 26 Park Lane, London, Esquire, of founding and endowing Fellowships with the objects and on the terms and conditions hereinafter contained and with a view thereto, has transferred to the four persons last-named parties hereto of the second part the investments specified in the First Schedule hereto, which are of the estimated value of £215,000, and should produce an annual income of about £7,525. Now in pursuance of the said desire

This Indenture witnesseth and the Founder hereby declares as follows:—

1. The objects of the Founder are to promote the advancement by means of research of medicine and the allied sciences in their relation to medicine, and to do so by founding and endowing Fellowships to be called "Beit Memorial Fellowships for Medical Research," and to be of sufficient annual value to provide for the adequate support of the Fellows so that, while holding the Fellowships, they may be able to devote their whole time to research.

2. In this Deed of Foundation:—

(i.) The expression "the Trustees" means the persons parties hereto of the second part or other the Trustees for the time being of this Deed of Foundation.

(ii.) The expression "the Advisory Board" means the Members for the time being of the Advisory Board hereinafter constituted.

(iii.) The expression "the Endowment" means the said investments specified in the said First Schedule and the investments of any additions made to the Endowment and the varied investments for the time being representing such investments.

3. (i.) There shall be a body of Trustees all of whom shall be men.

(ii.) The number of the Trustees shall be not less than five nor more than seven.

(iii.) A Trustee may retire at any time by written notice given to the others of the Trustees or on the appointment of a new Trustee in his place.

(iv.) Members of the medical profession, whether Members of the Advisory Board or not, shall not be ineligible for the office of Trustee, but the Trustees shall not appoint a member of that profession to be a Trustee if the appointment will make or continue the number of Trustees of that profession more than two.

(v.) The Principal for the time being of the University of London shall be one of the Trustees, but only while he shall hold the office of Principal.

(vi.) The following shall be the first Trustees, that is to say:—

The Right Honourable Alfred Viscount Milner, G.C.B., G.C.M.G.

The Right Honourable George Nathaniel Baron Curzon of Kedleston, G.C.S.I., G.C.I.E.

The Right Honourable Richard Burdon Haldane, of 28 Queen Anne's Gate, London, K.C., M.P.

H. A. Miers, Esq., F.R.S., the Principal of the University of London.

The Founder.

James Kingston Fowler, of 35 Clarges Street, Mayfair, London, M.D., and

Bourchier Francis Hawksley, of 14 Hyde Park Gardens, London.

4. (i.) The affairs of the Trust shall be administered by the Trustees.

(ii.) The income of the Endowment shall be applied by the Trustees:—

(a) In keeping such a balance at the Bank as they shall from time to time consider desirable.

(b) In payment of the costs charges and expenses of the Trustees and the costs charges and expenses of the Advisory Board and the members thereof and generally of the administration of the affairs of the Trust.

(c) In payment to the Fellows of their Fellowships and

(d) Any balance shall be applied by the Trustees to promote in such manner as in their uncontrolled discretion they shall think proper the advancement by research of medicine and the allied sciences in their relation to medicine but without imposing any obligation whatever on the Trustees it is the desire of the Founder that such balances be applied to the increase from time to time in the number of Fellowships.

#### THE ADVISORY BOARD.

5. (i.) There shall be an Advisory Board of men consisting of not less than five nor more than seven.

(ii.) A member of the Advisory Board shall hold office for five years and shall be eligible for re-appointment.

(iii.) Every member of the Advisory Board shall be a member of the medical profession.

(iv.) A Trustee being a member of the medical profession shall not be ineligible for appointment as a member of the Advisory Board.

(v.) A member of the Advisory Board may retire at any time by written notice given to the Trustees.

(vi.) The Board shall make such reports to the

Trustees as are herein provided for and perform such other duties as are hereinafter imposed on them.

(vii.) The following shall be the first members of the Advisory Board that is to say:—

Sir T. Clifford Allbutt, K.C.B., M.D., F.R.S., Regius Professor of Physic, University of Cambridge.

J. Rose Bradford, M.D., D.Sc., F.R.S., Professor of Medicine, University College Hospital Medical School, Secretary of the Royal Society.

James Kingston Fowler, M.A., M.D., D.Sc., Senior Physician to the Middlesex Hospital, late Dean of the Faculty of Medicine, University of London.

C. J. Martin, M.B., D.Sc., F.R.S., Director Lister Institute of Preventive Medicine.

William Osler, M.D., F.R.S., Regius Professor of Medicine, University of Oxford.

E. H. Starling, M.D., F.R.S., Professor of Physiology, University College, London, University of London.

6. (i.) The annual value of the Fellowships shall be £250 and there shall be as many Fellowships of that annual value as the income of the Endowment available for the purpose will suffice to pay so that initially there will be thirty Fellowships.

(ii.) Provided that if at any time the Trustees shall be satisfied that the annual value of the Fellowships is not sufficient or is more than sufficient to provide for the adequate support of the Fellows they may increase or (as the case may require) reduce such annual value and at the same time make the necessary alteration in the number of Fellowships but not so as to prejudice the rights of any then existing Fellow.

7. (i.) The tenure of a Fellowship shall be three years subject to determination by the Trustees at the end of the first or second year if in their judgment the work of the Fellow during the year does not justify the retention of the Fellowship.

(ii.) Provided that in exceptional cases the Advisory Board may on the application of a Fellow recommend the extension for a further period not exceeding one year of the Fellowship held by such Fellow. The Advisory Board shall report the recommendation to the Trustees with a statement of the reasons for the recommendation. The Trustees shall in their discretion have power to grant or not to grant the extension.

(iii.) The Trustees may in their discretion for what they shall consider grave cause suspend for such time as they shall think fit or remove any Fellow from his Fellowship.

8. (i.) Every Fellow shall be a person man or woman of European descent by both parents but otherwise of any nationality whatsoever who at the date of election shall have taken a degree in any faculty in any University in the British Empire approved by the Trustees or if female have passed the examinations which would have entitled her if male to take any such degree.

(ii.) Provided always that in exceptional cases the Trustees may if the Advisory Board shall so recommend accept the possession by a Fellow at the date of election of a medical diploma registrable in the United Kingdom as a qualification for election to a Fellowship in lieu of his or her having taken such degree or passed such examination as aforesaid.

(iii.) No person shall be qualified or disqualified for election to a Fellowship on account of his or her religious or medical opinions.

(iv.) Any candidate for a Fellowship who shall directly or indirectly canvass any of the Trustees or any Member of the Advisory Board shall be disqualified for election to a Fellowship.

#### ELECTION TO FELLOWSHIPS.

9. (i.) Elections shall be made:—

(A) In each of the first second and third years after the date of this Deed of Foundation to such

number not being more than ten of the Fellowships as the Trustees shall think proper to fill and in each of the second and third year elections may in addition be made to any casual vacancies among the Fellowships.

(B) In each subsequent year to all or such less number as the Trustees shall think proper to fill of the Fellowships vacant on the day of election.

(ii.) Elections shall be made on or about the 1st day of January in each year the first election however being made on or about the 1st day of March, 1910.

10. (i.) Before any election of Fellows notice (which shall not be less than three calendar months' notice except in the case of the first election for which one calendar month's notice shall be sufficient) shall be given by advertisement in the Press of the date of election of the number of Fellowships it is proposed to fill and the date by which and the persons by whom applications will be received.

(ii.) Candidates for election to Fellowships shall make written application for election. The applications of candidates shall give full information as to their qualifications academic standing and previous career and state the general character of the research which they propose to carry on and the place at which they propose to carry it on. Applications must be accompanied by the names of not more than three references one of which shall be the name of the head or some Professor Lecturer Dean or Tutor of the University or College or of any College of the University at which the candidate took his or her degree or if female passed such an examination as is referred to in clause 8 of this Deed of Foundation. Candidates who are not graduates of a University must give as one of these references the name of a Teacher under whom they have studied for their diploma. No testimonials must be sent or will be received. The applications will be considered by the Advisory Board. The Advisory Board after consideration of the applications will decide which of the candidates are qualified and fit to be elected and as to their relative merits and in considering such relative merits the Advisory Board shall have regard not only to the personal record of the candidates but also to the importance of the research work proposed by them and regard may also be had to such work in relation to work upon which other Fellows are engaged or which other candidates propose to carry on. The Advisory Board will then make and forward a report to the Trustees which shall contain the names placed in the order of their relative merits and shall include the names of all the candidates whom the Advisory Board consider to be qualified and to be fit to be elected without regard to the number of Fellowships to be filled and will with such report forward any recommendations made under clause 8 of this Deed of Foundation also any recommendation for extension made under clause 7 of this Deed of Foundation.

(iii.) On the day fixed for election the Trustees having first decided whether any Fellowships are to be extended under Clause 7 of this Deed of Foundation shall elect from the list forwarded as aforesaid such qualified persons—without regard necessarily to the order of their relative merits—as they shall think fit to the vacant Fellowships or to such of them as they shall think fit. In electing any Fellow the Trustees shall specify the work of research which he is authorised to carry on and the place at which he is authorised to carry it on.

11. (i.) In the Second Schedule hereto is contained a list of the recognised places of research.

(ii.) Provided that the Trustees may at any time after receiving a report from the Advisory Board remove any place of research from or add any place of research to the list aforesaid.

(iii.) Fellows may carry on research only at places of research included in the list for the time being of recognised places of research.

(iv.) Provided that the Trustees may at any time after receiving a report from the Advisory Board give permission to any Fellow in lieu of carrying on research at any of the recognised places of research to carry on research during a specified period of the tenure of his or her Fellowship at any Hospital College Medical School (including a School of Tropical Medicine) or Laboratory or other place not included in the list for the time being of recognised places of research.

#### DUTIES AND OBLIGATIONS OF FELLOWS.

12. (i.) Fellows shall devote the whole of their time to the authorised work of research and shall carry it on at their authorised places of research and shall not without the sanction of the Trustees take or hold any appointment whether paid or unpaid.

(ii.) Provided that any Fellow may with the previous sanction of the Advisory Board but not otherwise change his or her work of research and the place of research at which the work is to be carried on.

(iii.) No Fellow shall during the tenure of his or her Fellowship without the sanction of the Advisory Board enter or work for any examinations for any degree or diploma except such as is taken by the presentation of a thesis.

(iv.) At least one calendar month before the date fixed for the annual election of Fellows each Fellow shall furnish to the Advisory Board a detailed written statement of his or her work during the past year. These statements shall be considered by the Advisory Board who shall report thereon to the Trustees and make recommendations as to the approval or disapproval of such work and in the case of Fellows concluding the third year of their tenure and applying for extensions of their Fellowships as to such extension.

(v.) Provided that in any case in which the Advisory Board shall think necessary they may in order to enable them to better make such report and recommendations obtain expert advice on the work done by any Fellow but shall not in any year incur a greater expense in such advice than the sum placed at their disposal by the Trustees.

(vi.) Every Fellow who shall publish the result of his research in any form shall place immediately after his or her name upon the title page the following words "Beit Memorial Research Fellow."

13. Without prejudice to anything hereinbefore contained and in addition to all powers and authorities hereinbefore conferred on them the Trustees shall have the following powers and authorities:—

(i.) To appoint a new Trustee or Trustees.

(ii.) To appoint a new Member or new Members of the Advisory Board after receiving a report from the Advisory Board.

(iii.) To invest the Endowment or any part thereof in any investments for the time being authorised by law for the investment of trust funds with power to vary any existing or future investments for others of a nature hereinbefore authorised.

(iv.) In cases where investments cannot or cannot conveniently be held in the names of all the Trustees to make arrangements for the same being held in the names of some of them only.

(v.) To employ and pay a Secretary and such other officers clerks and servants as shall be necessary for the purposes of the affairs of the Trust.

(vi.) To hire or make other arrangements for an office whereat the affairs of the Trust may be carried on.

(vii.) To make vary and repeal regulations not inconsistent with this Deed of Foundation with regard to all or any of the following matters (that is to say):—

(A) Meetings of the Trustees and the quorum at any meeting;

(B) Meetings of the Advisory Board and the quorum at any meeting;

(C) The advertisement of elections to Fellowships and in what papers the advertisements shall appear;



(D) The election of persons to the Fellowships and the method in which their qualifications are to be ascertained;

(E) The suspension and removal of Fellows from their Fellowships and the extension of Fellowships;

(F) The method and time of payment of the Fellowships; and

(G) Any and every other matter with regard to which they shall consider regulations necessary or desirable.

14. After the expiration of the period of 20 years from the date of this Deed of Foundation a majority of not less than three-fourths of the whole number for the time being of the Trustees may from time to time (but during the lifetime of the Founder only with his written consent) revoke or alter any of the provisions contained in this Deed of Foundation (except in Clause 1 thereof) and make any new provisions in lieu thereof. Provided expressly that no such revocation alteration or new provision shall be in any way whatsoever inconsistent with any of the objects of the Founder as stated in Clause 1 of this Deed of Foundation.

In witness whereof the parties hereto have set their hands and seals the day and year first above written.

#### RECOGNISED PLACES OF RESEARCH.

1. The Physiological Laboratory of the University of London, South Kensington.
2. The Institute of Physiology, University College, London, University of London.
3. The Laboratories of the Departments of Chemistry, Biology, Physics, Anatomy, Pharmacology, and Hygiene, University College, London, University of London.
4. The Laboratories of the Departments of Chemistry, Biology, Physics, Anatomy, Physiology, Pharmacology, and Hygiene, King's College, London, University of London.
5. The Brown Institution, University of London.
6. The Laboratories of the Royal Naval Medical Service, Haslar Hospital.
7. The Laboratories of the Royal Army Medical College, Millbank, London.
8. The Lister Institute of Preventive Medicine.
9. The Laboratories of the Imperial Cancer Research Fund.
10. The Cancer Research Laboratories of the Middlesex Hospital.
11. The Laboratories of the Royal Commission on Tuberculosis.
12. The Laboratory of the London County Asylum, Claybury, Woodford Bridge, Essex.
13. The London School of Tropical Medicine, Victoria and Albert Docks, London.
14. The Liverpool School of Tropical Medicine.
15. The Laboratories of the Royal Institute of Public Health, 37 Russell Square, London.
16. The Laboratory of King Edward VII.'s Sanatorium, Midhurst, Sussex.
17. Such Hospitals and Medical Schools as are schools of the University of London in all the departments of their work.
18. Such Hospitals, Colleges, Medical Schools (including Schools of Tropical Medicine), Laboratories, and other places as may be approved by the Trustees after receiving a report from the Advisory Board.

The form of application for a Beit Memorial Medical Research Fellowship requires the applicant to state, in addition to personal details and references, his or her degrees or medical qualifications, education, general as well as scientific and professional, distinctions gained, original contributions to science or medicine, present occupation, and the general character of the research proposed to be undertaken.

A GRAND PRIZE (Highest Award) has been conferred upon Messrs. Burroughs Wellcome and Co. for their exhibit of "Tabloid" and "Soloid" brand products and "Wellcome" brand chemicals, at the recent Alaska-Yukon-Pacific Exposition, held at Seattle.

## REVIEWS OF BOOKS.

### MEDICAL MORBID ANATOMY. (a)

THE object of this volume is "to provide students with a concise account of the morbid anatomy of medical diseases, and enough pathology to explain the lesions described." Several excellent books have been written on surgical pathology, but hitherto no small work dealing with purely medical pathology has been written. We, therefore, welcome the handy manual under review as supplying a definite want in medical literature. As a companion to ordinary text-books on the practice of medicine it will be found invaluable. The descriptions given of the pathology and morbid anatomy of the various diseases mentioned are necessarily short, but still they are sufficient for the practical needs of students, for whom the book is primarily intended. The writers have drawn largely from their own somewhat extensive experience, and the statements made are characterised by general thoroughness and accuracy, which make the book a reliable one in every respect. For the convenience of students attending St. Bartholomew's Hospital, marginal references are given to specimens in the museum attached to that school, but we doubt very much the advantage of this arrangement. Practitioners whose knowledge of pathology has become somewhat rusty cannot do better than study this book, which forms an excellent introduction to the subject, and certainly contains all the information the student of medicine requires, not only to fit him for the final examination, but for the practice of his profession. We congratulate the authors on the publication of a book which possesses more than ordinary merit.

### MILITARY SANITATION IN HOT CLIMATES. (b)

MAJOR BLACKHAM's book has 143 pages, and deals with military sanitation in a clear and practical manner, and as the preface suggests is worded in a way suitable not only for "use to officers presenting themselves for examination for promotion in subject (J.), but also of real utility to the readers and their men when that desideratum of the soldier's life arrives, namely, "active service." For this purpose the book will be useful. In the next edition something about other blood-sucking flies, beside the mosquito, will no doubt find a place. The book is dedicated, with permission, to Lieut.-General Sir James Willcocks, K.C.M.G., C.B., D.S.O., whose experiences in West Africa have no doubt gone far to develop his sympathetic attention to medical matters.

### DICTIONARY OF OPHTHALMIC TERMS. (c)

THE author of this booklet tells us that his aim has been to make it a convenient, useful reference for the "busy practitioner" and the medical student, many of the terms not being found in the ordinary medical dictionary. All dictionaries, as Mark Twain says, "have to draw the line somewhere," and medical dictionaries find it necessary to leave out words relating to special subjects for which there is little or no use. At random some of this may be mentioned: "ablepsia," "achlys," "amphiblastoiditis," "caligo," "copiopia," "duscitas," "opsionosis," "Rhenis," "Taraxis," "Tylosis"—for the explanation of these terms the reader must refer to the author's book. For the rest, we notice that he describes

(a) "Medical Morbid Anatomy and Pathology." By Hugh Thurnfield, M.D., F.R.C.P., Senior Demonstrator of Medical Pathology, St. Bartholomew's Hospital, etc., and Wm. F. S. Branson, M.D., M.R.C.P., Junior Curator of the Museum, St. Bartholomew's Hospital. Pp. viii., 262. Crown 8vo. London: H. K. Lewis. 6s. net.

(b) "Military Sanitation for Soldiers serving in Hot Climates." By Major Robert J. Blackham, D.P.H. Lond., R.A.M.C., of the Middle Temple, Barrister-at-Law, Honorary Associate of the Order of St. John, Divisional Sanitary Officer, First Division, Indian Army; Fellow of the Society of Medical Officers of Health, and of the Royal Institute of Public Health; Member of the Royal Sanitary Institute. Bombay: Thacker and Co., Ltd. London: 1909.

(c) "Dictionary of Ophthalmic Terms, with Supplement." By Edward Maglalis, M.D., D.P.H. Bristol: John Wright and Sons, Ltd.

"nyctalopia" as day blindness, and "hemeralopia" as night blindness—definitions which are thus given in German and American text books—whereas in this country the interpretation of the terms is used in exactly the opposite sense. The confusion thus caused has mostly led English ophthalmic surgeons to discard the classical expressions, and use instead the English synonyms only, namely, day blindness and night blindness. Again, "onyx" is not now properly described as "pus between the layers of the cornea"—nor does the explanation of "Franklin lenses the same as bifocal," convey what is meant by this noun of optical contrivance. In a supplement the author adds some practical notes on testing the vision, the ordering of glasses, etc., and gives some useful formulæ for the treatment of the commoner varieties of diseases of the eye. The author has evidently expended a good deal of trouble in making a complete dictionary of ophthalmic terms—with some of which it would not be difficult for a student to puzzle, even would it be difficult for his teacher to explain them offhand.

#### GALL-STONES, THEIR COMPLICATIONS AND TREATMENT. (a)

WE welcome the appearance of this little book on gall-stones, for the reputation of the authors ensures that the subject will be presented in the most practical and up-to-date way.

The authors have endeavoured to present as briefly and yet as clearly as possible both the medical and surgical aspects of cholelithiasis, and also the complications to which the presence of gall-stones may give rise. We congratulate the authors on the way they have succeeded in their object, for the book is not only pleasant to read, but interesting and instructive. We feel sure that it will prove useful, not only to the practitioner but also to the student, for, notwithstanding the excellent way it is illustrated and turned out, the price should bring it within the reach of all.

We have only one small suggestion to make, and that is in reference to Cammidge's "pancreatic reaction," which is referred to several times, but possibly owing to the modesty of one of the authors the actual test is not described. We think that a description of this characteristic sign would not be out of place, for the book is sure to fall into the hands of some who may be unfamiliar with the test.

#### DISEASES OF THE EAR. (b)

IT is a pleasure to welcome the fourth edition of such a popular otological text-book as that before us, and it is additionally a matter for congratulation to find that such a well-known otologist as Dr. Thos. Barr has so talented a son to assist him in its production and to perpetuate a name so honoured in aural surgery.

The plan of the book follows that of its predecessors, and is much enhanced by many additions, particularly by the excellent coloured plates.

There are, however, several matters to which we would direct the attention of the authors with a view to addition, modification, or correction in the fifth edition.

In the directions for passing the catheter, there is no mention of the importance of never performing this manipulation except with the aid of the diagnostic tube. We are, however, glad to see that the dangers of Valsalva's method are well emphasised.

The section devoted to functional tests might well be enlarged. It is a pity that the watch is recommended as a test, and we cannot agree that the "chief value" of the acoumeter is for those who cannot hear the watch. Rinne's valuable test is dismissed in far too short a manner, and no mention is made of Lake's

work upon the subject. We are surprised, too, to find that testing is advised *before* physical examination, a foolish recommendation which, if followed, causes much waste of valuable time.

In discussing *paracusis Willisii*, no mention is made of Liebermann's explanation, which is, perhaps, the most likely yet advanced.

We are glad to find that the authors no longer considered sclerosis as an inflammatory disease, but as a separate pathological condition. It is a matter for surprise, however, that the work of their distinguished fellow-townsmen, Albert Gray, is passed over in silence.

The chapter upon diseases of the internal ear is very meagre, and would well bear extension. A paragraph is devoted to operations for the relief of vertigo and tinnitus, in which the authors appear to be unaware that Ballance's case of division of the auditory nerve was a failure, and have overlooked Yearsley's completely successful case of destruction of the cochlea.

Despite these criticisms, we must cordially congratulate the authors upon their "Manual," which, if not likely to be of much value as a work of reference, cannot fail to be popular as a text-book for students and practitioners.

#### DISEASES OF THE THROAT. (a)

AFTER a lapse of fifteen years since the first edition of this book, we welcome the second edition, which appears in a considerably enlarged form. This increase in the size of the volume has been necessitated by the giant strides which have been made in this special branch of surgery during the past decade and a half. The author introduces his book with a minutely detailed description of all the modern methods and technique of laryngoscopic examination, including the more recently devised apparatus of Killian and Brünning for direct laryngoscopy and bronchoscopy.

In each section of the book classification, ætiology, symptoms, differential diagnosis, prognosis, and treatment, therapeutical and surgical, all in turn receive appropriate consideration. The pathology—the final court of appeal in all medicine—of the various affections of the throat with which the book deals is carefully discussed. It receives the attention which is due to the pathology of all diseases, no matter where located, and which is essential for their rational and successful treatment.

In each chapter the author cites cases which have come under his own observation in illustration of the description in the text. These, though they add somewhat to the bulk of the book, serve as concrete typical examples of the course of the diseases and the line of treatment to be adopted, adding at the same time a living reality to the facts stated in the book. One of the most salient features of Dr. Downie's work is his dogmatism. In one important particular, however, many will dissent from the teaching of the author. While he strongly recommends chloroform anæsthesia for the removal of tonsils and adenoids, we would as urgently advocate the employment of gas and ether for inducing anæsthesia, particularly when, as is so frequently the case in practice, the thorough preparation of the patient may not be efficient. The differential diagnosis of tumours, benign and malignant, from syphilitic and tubercular affections of the larynx is dealt with in a careful and explicit manner, and the advantages and disadvantages of the several methods of their treatment are fully discussed.

The chapters in which the motor and sensory neuroses of the larynx are considered provide interesting and instructive reading.

Both students and practitioners will find the section on therapeutics extremely useful, and full of suggestions for the proper treatment of the inflammatory conditions of the throat and larynx, which are fully set forth in the earlier chapters of the book.

(a) "Gall-Stones, their Complications and Treatment." By A. W. Mayo-Robson, D.Sc., F.R.C.S., and P. J. Cammidge, M.D. Oxford Medical Manuals: Henry Frowde and Hodder and Stoughton. Price 5s. net. 1909.

(b) "A Manual of Diseases of the Ear." By Thos. Barr, M.D., and J. Stoddart Barr, M.B., Ch.B. Fourth Edition. Glasgow: Jas. Maclehoose and Sons. 1909.

(a) "Clinical Manual for the Study of Diseases of the Throat." By James Downie, M.B., F.F.P.S.G., Lecturer on Diseases of the Throat and Nose, University of Glasgow; Surgeon for Diseases of the Throat and Nose, Western Infirmary. Glasgow: Jas. Maclehoose & Sons.

## LITERARY NOTES.

We have received a copy of Herbert Fry's well-known guide to the London Charities. It forms an indispensable reference book to hospital secretaries and all interested in philanthropic work. An interesting preface contains a summary of the year's work, and an account is given, without comment, of the petition sent to the Chancellor of the Exchequer, with a view of modifying the adverse effects likely to follow the new methods of taxing land and of estates generally. It may be remarked, in passing, that such a consideration is hardly likely to be allowed to interfere with the application of financial principles approved by the legislature. A huge mass of details has been brought together, and so far as we have been able to test it, the information conveyed is of an accurate nature. The price is eighteenpence, and the publishers are Messrs. Chatto and Windus.

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We have been favoured with an unusual number of "Annuals" at this season, some especially designed for the medical profession, others for general use, and one or two for special purposes. In the latter category may be classed "The Englishwoman's Year Book and Directory," 1910, edited by G. E. Mitton, and published by Messrs. A. and C. Black, Soho Square, London, at price 2s. 6d. net. As its title implies, it is specially for the use of women, and contains invaluable information in regard to any career open to them. The mass of information in regard to the position of women in municipal, industrial and social life can probably be found nowhere else. The book has been called the "Woman's Whitaker," and well merits the title, but it is more than this, for, besides all usual information, there is much not to be found in Whitaker or any other reference book.

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AMONG the Christmas literature that has reached us, we would draw special attention to "Everybody's Story Magazine," published by the S.P.C.K. Society at 4 Bouverie Street, London, at the modest price of 4d. It consists of nine complete stories by well-known writers, full of healthy and stirring anecdote. "The Butler and Hero" may be taken as a remarkable story of the Boxer rising and the forcing of the renowned Pekin Gate by the allied armies, which grips one by its rehearsal at the dinner-table as if a present witness of the heroism of the little Japanese band, whose names are now honoured as immortals in that interesting country.

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We have received a neat and attractive little pamphlet from Messrs. the J. R. Riedel Co., of London. It contains brief notices of the eight preparations with which the name of that firm is associated. Aperitol comes first on the list. It combines the aperient principles of phenol-phthalein with a sedative valerian principle, thereby avoiding the pain that often goes with the former drug. Gonosan is a well-known remedy for acute gonorrhœa. It consists of a combination of oil of sandalwood with resin of Kava-Kava (the root of *papa methysticum*), which is said to exert a specific anodyne action on the mucous membrane of the whole urinary apparatus. It is put up conveniently in capsules. Thiol is a dark brown powder (or alternatively a liquid), which has a desiccative and astringent action on the skin; useful in psoriasis, erysipelas, and other affections of the skin. The rest of the remedies noticed have each a practical value to the practitioner. Any medical man can obtain a copy by writing to the J. D. Riedel Co., 54 Cannon Street, London.

## NEW PREPARATIONS.

We have received from Messrs. Parke, Davis and Co. specimens of

### CHLORETONE GAUZE.

Chloretone has been widely employed for application to wounds either as a dusting powder or as a solution

for saturating dressings), for the healing of which its analgesic and antiseptic properties have proved very helpful. It is thought, therefore, that the provision of Chloretone Gauze ready for immediate use will be a welcome addition to the armamentarium of the surgeon and general practitioner. Chloretone Gauze is saturated with a ten per cent. solution of the chemical (a derivative of chloroform and acetone) and is supplied in sterilised glass jars provided with air-tight caps, each jar containing one square yard of the moist gauze. The same manufacturers send us

### FORMIDINE GAUZE.

This new surgical dressing possesses powerful antiseptic properties, and may be used in place of iodoform gauze, with the advantages of freedom from unpleasant odour and liability to stain. It is prepared by treating sterilised gauze with a five per cent. suspension of Formidine, which chemical is a condensation product of iodine, formic aldehyde, and salicylic acid. In contact with organic alkaline secretions, Formidine slowly dissolves and develops the germicidal activity of its constituents. It is packed in sterilised glass jars provided with air-tight caps, each jar containing one square yard of the moist gauze.

### FRIARY INVALID STOUT.

We have examined "Friary Invalid Stout," as made by the Friary, Holroyd and Healey's Breweries, Ltd., of Guildford, and we find it to be a well-brewed malt liquor in which the high percentage of malt extractives is a distinct dietetic advantage over ordinary stouts. The proportion of proteins in these extractives is satisfactorily high, and we found the stout to be in good condition. The taste is free from acidity, and is pleasing to the palate. Our analysis showed the stout to have the following composition:—

Extractive matter	...	7.23 per cent.
Proteins	...	0.49 per cent.
Mineral matter	...	0.35 per cent.
Alcohol (per cent. by volume)	...	6.02 per cent.
Alcohol (as proof spirit)	...	10.54 per cent.
Volatile acid (as acetic acid)	...	0.04 per cent.
Fixed acid (as lactic acid)	...	0.16 per cent.

We found no preservatives present, and the general characters of the stout are such as to allow it to be recommended to those under medical care, with confidence.

## MEDICAL NEWS IN BRIEF

### Diseases of Occupations in Factories and Workshops.

THE total number of cases of poisoning and of anthrax reported to the Home Office under the Factory and Workshops Act during November, 1909, was 58, consisting of 53 cases of lead poisoning, 3 of mercurial poisoning, and 2 of anthrax. In addition, 20 cases of lead poisoning (6 of which were fatal) were reported during November among house painters and plumbers.

During the eleven months ended November, 1909, the total number of cases of poisoning and of anthrax was 581, as compared with 682 in 1908. The number of deaths during the same period was 37 as against 39 in 1908. In addition, there were 221 cases of lead poisoning (including 43 deaths) among house painters and plumbers during the first eleven months of 1909, as compared with 214 cases (including 36 deaths) during the same period of 1908.

### Health for the Army.

THE Director-General of Army Medical Services is able to record increasing improvement in the health of the Army, a great decline in the constantly-sick rates, a consequent addition to the effective strength, and a corresponding decrease of expenditure in the non-effective vote. During the ten years 1899-1908 the fall in the constantly-sick rates is calculated to have added 5,776 men to the effective strength, while the wastage through death and invaliding has been re-

duced by 2,900 men per annum. The admission age is eighteen, but in the case of boys who enlist in the Special Reserve at seventeen, and are transferred to the Line at seventeen-and-a-half, the youthfulness is acknowledged. These young fellows may be healthy, and may not often appear on the sick list, but they are not sufficiently mature for foreign service, and they are not so remunerative as the more seasoned men who are sought for. Sir Alfred Keogh's report discusses these and other questions concerning the health of the Army. Of course, under a voluntary system we cannot choose recruits as we would.

#### Large Bequest for Medical Research.

DR. CHARLES GRAHAM, of The Reculvers, Hastings, and formerly of Berwick-on-Tweed, at one time Professor of Chemistry at University College, London, and closely identified with the Society of Chemical Industry since its formation, who died on November 13th, aged 74, left estate valued at £47,782 17s. gross, with a net personalty £47,443 7s. 4d.

Subject to various bequests, the testator left the residue of his estate, probably about £35,000, to the Senate of the University of London, to found a fund to be known as the "Charles Graham Medical Research Fund."

#### Medical Certificates.

IN Rothesay Sheriff Court, on December 16th, continuation of proof was asked in a case from Arran on account of the illness of one of the parties. A letter from a medical man was produced to the effect that the man was unable to attend the court. Sheriff Martin said this could not be accepted as a certificate, not being "on soul and conscience," and was not such as might be expected even from an Arran doctor. While he would grant the continuation in this case, he wished it to be clearly understood that in future the Court would not consider medical certificates which were not in proper form.

### PASS LISTS

#### Cambridge University.

THE following candidates have passed the First Examination for Medical and Surgical Degrees.—Part III.—Elementary Biology.—J. C. Andrews, K. B. Bellwood, J. L. Davies, H. S. Evans, H. A. C. Goodwin, C. H. Gow, W. B. Loveless, R. D. Marett-Tims, E. W. Mason, H. L. Milsom, E. G. D. Murray, H. R. Pollock, E. J. Selby, T. H. Somervell, G. S. Trower, C. C. A. Whitworth, W. R. Wilson, and F. B. Winfield.

The following candidates have passed the Third Examination for Medical and Surgical Degrees.—Part I.—H. C. Attwood (Ds), G. V. Bakewell (Ds), T. E. Banister (Ds), D. C. Bluett, H. T. H. Butt (Ds), J. W. H. Chun (Ds), E. B. Clayton (Ds), H. F. Comyn (Ds), H. J. Couchman (Ds), C. H. Crawshaw (Ds), H. J. M. Cursetjee, J. Ellison (Ds), G. V. Fiddian (Ds), D. J. Freyer, A. W. Gaye (Ds), A. C. Gemmell (Mag.), J. B. Hance (Ds), G. G. Johnstone (Ds), R. F. Jones, G. L. Keynes (Ds), J. C. Marklove (Ds), R. W. Meller (Ds), H. J. S. Morton (Ds), F. C. Newman (Ds), A. B. Paul (Ds), M. N. Perrin (Ds), C. Raymond (Ds), E. Rayner (Ds), H. S. Reed (Ds), E. D. W. Reid (Ds), H. B. Richmond (Ds), F. H. Robbins (Ds), L. T. Rutherford, I. Singh (Ds), F. B. Smith (Ds), W. F. Thompson (Ds), J. R. Waddy (Ds), F. W. Watkyn-Thomas (Ds), H. B. Weir (Ds), H. F. Wilson (Ds), J. Winterbotham (Ds), and C. Worster-Drought (Ds).

The following candidates have passed the First Examination for Medical and Surgical Degrees.—Part II.—Physics.—J. C. Andrews, L. W. Batten, A. B. Bratton, B. Burnside, A. O. Courtis, C. D. Day, H. S. Evans, G. L. Ferguson, H. Gardiner-Hill, H. L. Garson, E. A. Gibb, C. C. Goodall, H. A. C. Goodwin, C. Grantham-Hill, E. T. Halnan, J. B. Hunter, R. W. P. Jackson, C. E. Kindersley, E. A. Leek, K. Masson, E. G. D. Murray, D. F. A. Neilson, W. D.

Newcomb, S. D. Nurse, A. V. O'Keeffe, W. Raffle, G. B. Sellwood, E. W. L. Sharp, W. G. Thompson, G. S. Trower, W. L. Willett.

#### The University of Sheffield.

THE Council, at its last meeting, made the following appointment:—Mr. Graham Simpson, F.R.C.S., to the Lectureship in Operative Surgery. At the same meeting the Pro-Chancellor (Mr. George Franklin) and the Vice-Chancellor (Sir Charles Eliot) were appointed representatives of the University on the Executive Committee of the Modern University Congress.

#### Conjoint Examinations in Ireland.

THE following candidates have passed the examinations of the Royal College of Physicians and the Royal College of Surgeons:—

Preliminary.—S. H. Bannerman, W. J. Broderick, A. F. Carbury, J. Daly, T. Flynn, J. Fox-Russell, G. P. Hely, J. J. Hutton, M. J. B. Kennedy, Miss M. Lees, P. S. McCabe, A. Macauley, J. A. Musgrave, J. O'Carroll, E. O'Keeffe, F. J. Power, A. Porter, G. M. C. Powell, F. J. Robinson, N. A. K. Sparrow, T. H. Sarsfield, W. J. Sweeney, H. J. Swan, P. W. Walsh, S. Weinstock, L. E. Wigoder, R. H. Newman.

First Professional Examination.—J. P. Brennan, B. J. Cusack, J. J. L. Cox, H. A. S. Deane, E. G. Foley, A. B. Foott, R. F. J. Griffith, R. Green, J. F. Lyons, D. McEntire, R. J. May, C. J. O'Carroll, H. V. O'Donoghue, P. Rowan, T. F. Ryan, G. N. Smyth, R. Tivy.

Second Professional Examination.—M. J. Ahearn, A. J. Best, C. M. G. Campbell, T. J. Kelly, D. Murphy, G. Sheehan, G. A. Shiel, W. Waugh.

Third Professional Examination.—F. M. J. Byrne, T. Farrell, M. Golding, E. Holden, F. Hannigan, F. P. Kennedy, P. B. Kelly, N. Keating, A. G. MacIlwaine, W. G. Maguire, P. H. McDonough, C. Molan, B. O'Donnell, T. P. O'Reilly, T. F. O'Donnell, K. O'Sullivan, J. B. Power, L. C. Rorke, P. Ross-Todd, J. V. Ryan, L. W. Roberts, J. C. Scanlan.

Final Professional Examination.—S. J. Barry, R. Charles, W. Crymble, G. A. Finegan, H. Gray, W. F. Lane, C. Macauley, T. J. McDonald, C. O'B. Ryan, O. W. J. Wynne.

Examination for the Diploma in Public Health.—J. Casey, F.R.C.P. and S.I., A. Cook, M.D. Univ. Glasg., F.R.C.S. Edin., Capt. O. W. A. Elsner, R.A.M.C., L.R.C.P. and S.I., J. J. A. Gannon, M.B., R.U.I., J. C. Griffiths, M.D. Univ. Lond., A. Leitch, M.B., R.U.I., R. P. McDonnell, L.R.C.P. and S.I., C. F. Watson, M.R.C.S.E., L.R.C.P. Lond., W. P. Warren, L.R.C.P. and S. Edin.

N.B.—The Royal College of Physicians of Ireland and the Royal College of Surgeons in Ireland have had under consideration the position of medical students who have taken out some of their examinations in the late Royal University of Ireland, and who may desire to carry on their studies and to take their qualifications under the Conjoint Scheme for Ireland.

The Royal Colleges have decided that candidates for examination under the Conjoint Scheme who have obtained exemption from examination in certain subjects by reason of their having, prior to November 1st, 1909, passed in such subjects at some University or other Licensing body, be excused from payment of half the fees for the Examination or Division of Examination from which they have been exempted.

#### Trinity College, Dublin.

The following have passed the Diploma in Public Health, Michaelmas, 1909:—

Part I.—Joseph W. Houston, Robert B. Anderson.  
Part II.—Samuel B. Smith, Robert B. Anderson, Joseph W. Houston.

OUR energetic contemporary, *The Englishman*, has announced its intention of publishing a series of articles on tuberculosis, and recently, by way of introduction, published a congratulatory letter from Sir Lauder Brunton, together with an excellent full-page portrait of that well-known authority.

## NOTICES TO CORRESPONDENTS, &c.

Correspondents requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

### SUBSCRIPTIONS.

SUBSCRIPTIONS may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s.; post free at home or abroad. Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially-appointed agents. Indian subscriptions are Rs 15.12. Messrs. Dawson and Sons are our special agents for Canada.

### ADVERTISEMENTS.

FOR OWN INSERTION:—Whole Page, 25; Half Page, 23 10s.; Quarter Page, 21 5s.; One-eighth, 12s. 6d.

The following reductions are made for a series:—Whole Page, 13 insertions, at 23 10s.; 26 at 23 3s.; 53 insertions at 23, and pro rata for smaller spaces.

Small announcements of Practices, Assistantships, Vacancies, Books, &c.—Seven lines or under (70 words), 4s. 6d. per insertion; 6d. per line beyond.

ORIGINAL ARTICLES OR LETTERS intended for publication should be written on one side of the paper only and must be authenticated with the name and address of the writer, not necessarily for publication but as evidence of identity.

CONTRIBUTORS are kindly requested to send their communications, if resident in England or the Colonies, to the Editor at the London office; if resident in Ireland to the Dublin office, in order to save time in reforwarding from office to office. When sending subscriptions the same rule applies as to office; these should be addressed to the Publisher.

Dr. Kados (Budapest).—We know of no translation of "The Archives Generales," to which you refer.

### HOSPITAL APPOINTMENTS.

In reply to "Resident's" Inquiry, posts at children's hospitals are much sought after, and are generally announced, when vacant, in the medical journals. One, such as you are seeking, is advertised in our present number, at the Hospital for Sick Children, Great Ormond Street, London. It is the largest and most important children's hospital in the United Kingdom. You will find particulars on reference to our advertising columns.

L. M. S. (Glasgow).—Dr. Mond, whose death was recently announced, was not a medical man, but held the Ph.D. which gave him the prefix by which he was best known. The F.R.S. was awarded him in recognition of his wonderful discoveries in chemistry, gases and allied subjects.

### THE BUDGET AND THE MEDICAL PROFESSION.

WHAT, INDEED!—A member of the medical profession who presided at a political meeting in Nottingham, last week, made the following point in illustrating the biased view which the House of Lords took of the Budget. "Do you think," he asked, "that if it had been a proposal to tax doctors, it would have been referred to the Medical Council? Or if it had been a proposal to tax lawyers would it have been referred to the Law Society?"

ERRATUM.—At the heading of the clinical lecture "on the Prognosis and Etiology of Mitral Incompetence," in our last impression, the author, Sir John F. Broadbent, Bart., was incorrectly described as "Physician to St. Mary's Hospital"; it should have been, Physician to Out-patients at that Institution.

## Meetings of the Societies, Lectures, &c.

### WEDNESDAY, DECEMBER 22ND.

NORTH-EAST LONDON POST-GRADUATE COLLEGE (Prince of Wales's General Hospital, Tottenham, N.).—2.30 p.m.: Clinics: Medical Out-patient (Dr. T. R. Whipple); Skin (Dr. G. N. Meachen); Eye (Mr. R. P. Brooks). 3 p.m.: X-Rays (Dr. H. Pirie).

### THURSDAY, DECEMBER 23RD.

NORTH-EAST LONDON POST-GRADUATE COLLEGE (Prince of Wales's General Hospital, Tottenham, N.).—2.30 p.m.: Gynaecological Operations (Dr. A. E. Giles); Clinics: Medical Out-patient (Dr. A. J. Whiting); Surgical (Mr. Carson). 3 p.m.: Medical In-patient (Dr. G. P. Chappel).

## Appointments.

ARCHER, T. C. R., M.R.C.S., L.R.C.P.Lond., Clinical Assistant in the Eye Department at St. Thomas's Hospital.

BENTLEY, A. J. M., M.D., C.M. Edin., Lecturer in Tropical Diseases in the University of Manchester.

CHILD, W. N., M.R.C.S., L.R.C.P.Lond., Clinical Assistant in the Surgical Children's Department at St. Thomas's Hospital.

COLDICUTT, CLAUDE E. A., M.D. Edin., Assistant Medical Officer of Health of the County Borough of Leicester.

DELLSCHAFT, M. E., M.R.C.S., L.R.C.P.Lond., Clinical Assistant in the Ear Department at St. Thomas's Hospital.

EARLE, H. G., B.A. Cantab., Joint Lecturer in Biology at Middlesex Hospital Medical School.

FYFFE, E. L., M.B., B.S. Lond., M.R.C.S., L.R.C.P.Lond., Obstetric House Physician at St. Thomas's Hospital.

GRAHAM-JONES, J. L., M.R.C.S., L.R.C.P.Lond., Junior Obstetric House Physician at St. Thomas's Hospital.

HOPWOOD, J. S., M.R.C.S., L.R.C.P.Lond., Clinical Assistant in the Ear Department at St. Thomas's Hospital.

HUMPHREYS, H. E., M.R.C.S., L.R.C.P.Lond., Clinical Assistant in the Skin Department at St. Thomas's Hospital.

HUNTER, G. F., M.B. Aberd., Junior Assistant Physician to the Ayr District Asylum.

MCDONAGH, M.R.C.S., L.R.C.P.Lond., Medical Officer for the No. 2 District of Southampton.

MARKLOVE, J. C., M.R.C.S., L.R.C.P.Lond., Clinical Assistant in the Skin Department at St. Thomas's Hospital.

MATBURY, B. C., M.R.C.S., L.R.C.P.Lond., Clinical Assistant in the Throat Department at St. Thomas's Hospital.

MEAKIN, L., M.R.C.S., L.R.C.P.Lond., Clinical Assistant in the X-Ray Department at St. Thomas's Hospital.

MORCOM, A. F., M.R.C.S., L.R.C.P.Lond., Clinical Assistant in the Throat Department at St. Thomas's Hospital.

PARKINSON, W. R., M.R.C.S., L.R.C.P.Lond., Clinical Assistant in the Surgical Children's Department at St. Thomas's Hospital.

PRIDHAM, F. C., M.R.C.S., L.R.C.P.Lond., Clinical Assistant in the Medical Children's Department at St. Thomas's Hospital.

QUINN, A. E., M.B., Ch.B. Vict., Senior Assistant Resident Medical Officer at the Whitechapel Union Infirmary.

ROUTE, L. M., M.R.C.S., L.R.C.P.Lond., Clinical Assistant in the Medical Children's Department at St. Thomas's Hospital.

ROWNTREE, CECIL, M.B., B.S. Lond., F.R.C.S. Eng., Assistant Surgeon to the Cancer Hospital.

WINK, C. S., M.R.C.S., L.R.C.P.Lond., Clinical Assistant in the Mental Department at St. Thomas's Hospital.

## Vacancies.

Somerset County Council.—Assistant School Medical Officer. Salary £2.0 per annum, with necessary travelling and out-of-pocket expenses. Applications to the County Education Secretary, Weston-super-Mare.

Edmonton Union.—Resident Medical Superintendent. Salary £400 per annum, with unfurnished apartments, fire, light, and water, but no rations, furniture or service. Applications to F. Shelton, Solicitor and Clerk, "The Grange," White Hart Lane, Tottenham.

Gardians of the Wandsworth Union.—Assistant Medical Officer at the Home for Aged and Infirm, Church Lane, Tooting. Salary £130 per annum, with apartments, board, lodging and washing. Applications to F. W. Piper, Clerk, Union Offices, St. John's Hill, Wandsworth, S.W.

County Borough of Great Yarmouth.—Medical Officer of Health. Salary £400 per annum. Applications to W. Edgar Stephens, Town Clerk, Town Clerk's Office, Town Hall, Great Yarmouth.

Wye House Asylum, Buxton.—Assistant Medical Officer. Salary £120 per annum, all found. Applications to the Medical Superintendent.

Leeds Public Dispensary.—Junior Resident Medical Officer. Salary £100 per annum with board and lodging. Applications to the Secretary of the Faculty, Public Dispensary, North Street, Leeds.

Free Eye Hospital, Southampton.—House Surgeon. Salary £18 a year, with board and residence. Applications to Major I. W. Heathcote, Secretary.

West Herts Hospital, Hemel Hempstead, Herts.—House Surgeon. Salary £100 per annum, with rooms, board and washing. Applications to Robt. L. Butterfield, Assistant Secretary at the Hospital.

Manchester Children's Hospital (Out-patients' Department), Garside Street, Manchester.—Assistant Medical Officer. Salary £100 per annum. Applications to H. J. Easton, Secretary.

The Hospital for Sick Children, Great Ormond Street, London, W.C.—House Surgeon. Applications to the Secretary. Salary £30 for six months, washing allowance £2 10s., with board and residence in the Hospital. (See advt.)

## Marriages.

WHITTINGTON—RIDSDALE.—On Dec. 15th, at St. Mary Abbots, Kensington, Richard Whittington, M.A., M.D., of Silwood Place, Brighton, to Lilian Esther Ridsdale, younger daughter of the late E. L. J. Ridsdale, of Hyde Park Gate, and Rottingdean.

ST. JOHN—TWIGG.—On Dec. 18th, at St. Peter's Cranley Gardens, Winston Street, Andrew St. John, M.R.C.S., L.R.C.P., of Derwent House, Derby, eldest son of R. F. St. Andrew St. John, Esq., late 60th Rifles and Burma Commission, to Violet Julia Louisa, second daughter of Henderson James Twigg, Esq., of Petane Grange, Petane, Hawks Bay, New Zealand.

## Deaths.

KEMBLE.—On Dec. 11th, at Willoughby, Rugby, Mary Elizabeth wife of Arthur Charles Kemble, L.R.C.P., L.R.C.S. Ed., aged 46.

MAYNARD.—On Dec. 15th, at 4 Sutherland Avenue, Maida Vale, London, W., James Payne Maynard, M.B., M.Ch., the second son of the late Wm. P. Maynard, of Cork, aged 44 years.

PENDLEBURY.—On Dec. 13th, at Underwood, Grange-over-Sands, Marian, daughter of the late John Pendlebury, M.D., F.O.P.S. Cantab., of Manchester.

ROSCOE.—On Dec. 17th, at Stoke-on-Trent, Henry Roscoe, M.R.C.S. Eng., L.R.C.P.Lond., House Governor of the North Staffordshire Infirmary.

# THE MEDICAL PRESS AND CIRCULAR.

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No. 26.

## NOTES AND COMMENTS.

### No Small-pox Patients.

At a recent meeting of the South Staffordshire Joint Small-pox Hospital Board, at Wolverhampton, the question of using a small-pox hospital for the reception of phthisis patients was discussed. It appears that the hospital was built some years ago, but there had been no small-pox cases to put in it. The Medical Officer of Health, Dr. Reid, suggested it should be used for consumptives, and the local authority thereupon communicated with the Local Government Board. This raised the usual circumlocution storm. The official reply was to the following effect:—It did not appear to the Local Government Board, having regard to the terms of the South Staffordshire Joint Small-pox Hospital Order, 1903, that the Joint Small-pox Hospital Board could themselves undertake the treatment of cases of phthisis in their hospital. At the same time, the principle to utilise the hospital thus when the accommodation was not required for cases of small-pox was not one to which the Local Government Board would raise objection on medical grounds, assuming that the hospital were efficiently disinfected between its use for the two diseases, and provided that the consumptive patients could at once be removed in the event of cases of small-pox being notified. If it were proposed to let the small-pox hospital to a Hospital Committee of the Staffordshire County Council for the use of consumptive patients on the conditions indicated, and a Provisional Order were needed to enable the proposal to be carried into effect, the Board would be willing to consider an application for such an order.

### Further L.G.B. Views.

SUBSEQUENTLY, the Clerk of the local authority interviewed the Assistant-Secretary of the Local Government Board, when the following suggestions were made:—In the first place, the County Council should pass a resolution authorising the addition of phthisis to the list of infectious diseases. They should then appoint a committee under the Isolation Hospitals Act, which should include members of the Wolverhampton Council. The County Council should then agree with the Small-pox Hospital Board for the temporary use of the hospital, it being understood that if an epidemic of small-pox occurred the phthisis cases should be instantly removed. As Wolverhampton was a county borough and outside the Isolation Hospitals Act, it was suggested that the Wolverhampton Corporation should agree with the County Committee for so many beds or patients from Wolverhampton. By those measures the Assistant-Secretary thought the matter might be carried out, but he was very much averse from anything like a permanent arrangement, as the

Board anticipated, having regard to the long period which had elapsed since the last small-pox epidemic, it was safe to predict that sooner or later another would occur.

### Insurmountable Difficulties.

No wonder that the Chairman, in the brief discussion that ensued, expressed his opinion that the difficulties in the way of adopting the scheme were insurmountable. It is, of course, right that the Local Government Board should insist on every step in public health administration being taken in a legal and orderly fashion. At the same time, we cannot help regarding it as a little unfortunate that a local authority, bent on taking what is clearly a common-sense step in the direction of economy, should find so many obstacles in the plan. One would have thought, for instance, that any possible epidemic of small-pox might be provided for by the erection of a few galvanised iron huts. One happy feature of this otherwise uninspiring incident is the absence of patients for the small-pox hospital. Would that Jenner might return to the earth for a brief space of time and view a huge modern hospital built for small-pox patients, of whom not one had been known in the district for years past! Then we would have him look in for half-an-hour or so at an anti-vivisectionist meeting before flitting back to the region of spirits. (Anti-vivisectionists are at liberty to the copyright of this and the two preceding paragraphs.—ED., M. P. AND C.)

### Viavi Methods.

THE ways of the secret remedy vendors are multifarious, and display a business ingenuity and "pushfulness" that are simply astonishing. Some few weeks ago, a correspondent drew our attention to the fact that the Viavi remedies were advertised in the tram-cars of Hastings and St. Leonards, one of the most famous of our health resorts. At the same time, he pointed out the scathing revelations of the Viavi methods and remedies given in the American Medical Association's propaganda for reform in proprietary medicines. The methods adopted by the Viavi Company have been exposed many years ago in the United Kingdom, but there must be a good deal of money in the thing, for it is still being exploited in this country. *Truth*, which has always kept a watchful eye upon the proceedings of the Viavi Company, published on December 15th a further disclosure. It is stated in that journal that it was suggested to a lady canvasser who had not made a pecuniary success of her post, that she should invest £50 or £100, in which case she would be appointed to one of the best districts and sent to interview likely customers. This



method of unloading shares in a concern that, under the glare of recent exposures, are not likely to rise in value, is one not unfamiliar to "smart" commercialism. It certainly should place a heavy discount upon the blandishments of ladies who are worried to attend Viavi lectures.

**Nationalisation of Medicine.** THE proposal to nationalise medicine was raised some days ago at Plymouth, when Mr. R. Jaques gave a lecture at the Athenæum on "The Nationalisation of Medical Service." As the lecturer pointed out, there is a considerable amount of overlapping in the various medical services of the country, and his suggestion that Poor-law medical work should be merged in public health organisation doubtless deserves serious consideration, as even now the two appointments concerned are often held by the same individual. His further suggestion that the public health service should be national and not municipal, is already recognised in part. The county medical officers of health can no longer be removed from their posts without the consent of the Local Government Board, and to that extent there is central control. Mr. Jaques' final suggestion that all hospitals should be nationalised and the medical staffs paid, may, we think, require careful consideration. Freedom is the breath of life to science, and outside authority, be it ever so sympathetic, may perhaps tend to limitations which might lessen the independence which is so characteristic of our profession. Such a loss, while pernicious to physic, would be detrimental in the long run to the public also. Hospital appointments have always carried their own reward in the past, and will continue to do so in the future, especially as the outlook of specialism appears ever to be widening.

**Research Defence.** IN these days of partisanship it is refreshing to hear a man like Lord Cromer speak upon medical research. Among the useful offices filled by this great pro-consul is that of President of the Research Defence Society. On the 13th of this month he presided at a meeting held in the Royal Pavilion, Brighton, and dealt with the rights of all parties concerned, that is to say, the public, the anti-vivisectionists and the vivisectionists; at the same time he made it clear that, in his opinion, control by the authorities was justifiable to the extent of preventing unnecessary pain. These remarks coincide with our own expressed last week on the point. We trust those good folk who would not permit the killing of a cat to save the life of a bishop will give to Lord Cromer the considerate hearing they might deny to anything hailing from medical quarters. Sir A. Conan Doyle, who supported Lord Cromer on the above-mentioned occasion, claimed that animals benefit in a great measure from the investigations made on their kind. He cited the vast number of cattle now saved from a painful death by anthrax, rabies, rinderpest, and other diseases. Apart from the question of cure, he referred to the decrease of epidemics, due to the early diagnosis of disease. The more local branches of the Research Defence Society the better, for there can be no question that meetings like the one at Brighton will in time remove the dust raised around scientific research by anti-vivisectionists.

**Grouse Disease.** THE communication made by Dr. H. B. Fanshaw to the Zoological Society at its last scientific meeting forms a kind of interim report of the Commission on Grouse Disease, which was

appointed some time ago, and of which he is the protozoologist. Dr. Fanshaw's research seems to demonstrate the fact that the enteritis and diarrhoea which affect grouse chicks during the first month or six weeks of their life are due to a sporozoan parasite, *Coccidium avium*. The spores gather in the *cæcum*, pass out in the droppings and are swallowed by other chicks. The spores first exist in a cyst, which is dissolved by the pancreatic juice. Each liberated spore contains eight animalcules. Maggots of the dung fly also swallow the cysts, and passing them unaltered help to spread the disease. The *cæca* of adult grouse often contain large numbers of nematoid worms, and the cysts were first taken for their eggs; but some experiments by Dr. Leiper having established the fact that they were not worm eggs Dr. Fanshaw was able to trace their true pedigree. Dr. Fanshaw has been able to transmit grouse disease to fowl chicks and young pigeons. It is to be hoped that the Commission at the end of its labours may be able to formulate measures for the prevention of the disease, the ætiology of which seems now almost completely made out.

## LEADING ARTICLES.

### EXPERIMENTAL RESEARCH.

THAT the nature of mankind is in its essence conservative is shown by the way in which it clings to ancient habits, customs and details of its surroundings. Amid a wealth of illustrations, it may be pointed out that the common wood-chopper of to-day differs little in form from a polished flint axe of a prehistoric stone age; the common brown jug of the English cottager might have been dug out of the site of some Romano-British camp; the railway compartment carriage retains the stamp of the stage-coach of former days; and so on *ad infinitum*. The general truth appears to be that change in established and familiar forms and usages and the introduction of fresh ideas are slow and gradual. From this point of view it may be conceived that, as a whole, society has not yet grown accustomed to the use of the lower animals for the purposes of experimental research. There can be little doubt that the bitterness of many anti-vivisectionists is due to an imperfect recognition of the facts of the case. The more that one knows about the methods and results of experimental research, the more one is led to the inevitable conclusion that it is one of the unavoidable evils necessarily inflicted by man upon the lower animal for his self-protection and self-preservation, just as he eats their flesh and uses their hides, hair and bones for processes directly and indirectly connected with his own well-being. So far as the education of the public is concerned, the Research Defence Society, founded in 1908 by Mr. Stephen Paget, has done, and continues to do, most valuable work. At the recent opening of a Liverpool branch of the organisation, the pith of the matter was excellently put forward by Lieut.-Colonel J. Pilkington, F.S.A. The parent Society, he explained, was started by a number of eminent scientists and laymen, who felt it to be an absolute necessity in the interests of suffering humanity that an association should be formed of persons willing to aid in thwarting any undue and antagonistic efforts of the anti-vivisectionists.

tionists. That proposition goes to the root of the matter, for the medical profession has always readily fallen in with the demand for reasonable control over experimentation in order to vindicate their own position, as well as to reassure the public. With that end in view, experiments are performed only by licensed individuals, under Government control, and in accordance with an Act of Parliament, which, owing to some extraordinary obliquity of mental vision, the anti-vivisectionists wish to have abolished. The Society has made it a chief feature to collect and publish accurate information as to what is actually done in scientific circles, where the lower animals are used for purposes of experimental research; and they have put a large quantity of literature in circulation. In that effort they have simply endeavoured to act upon the opinion of many candid and competent judges, who hold that the continuance of such experiments is of the highest importance, not only to the present general welfare of mankind, but also to the future physical well-being of humanity. It should be borne in mind that research experiments are necessary, not only in combating disease, but also in the standardisation of medicines, in the control of our milk supplies, in the diagnosis of many infectious maladies, and in the investigation of cancer, sleeping sickness, Malta fever, and many other deadly diseases. Reducing the matter to simple terms, would be the anti-vivisectionist deliberately value the lives of half-a-dozen guinea pigs above the possible infection of half-a-dozen children by tuberculosis in milk? In the parlance of the public orator, we pause for a reply. Meanwhile, on turning to the latest available official figures, we find that rather over 96 per cent. of the "experiments" reported were simple inoculations or hypodermic injections, many of them practically painless in character; and, further, that more than half of the 96 per cent. were made in the study of cancer. The remaining half were largely examinations conducted by the Home Office and by public bodies to benefit public health. The serious operations were only  $3\frac{1}{2}$  per cent. of the whole, and in these anaesthesia was, of course, an indisputable legal condition. Colonel Pilkington made the sensible remark that experimental work was likely to be misunderstood so long as the Anti-Vivisection Society continued to spread misleading information, basing its indictments on what was alleged to take place on the Continent or in the United States, and by quoting what had happened in the United Kingdom prior to the passing of the Act which regulated and confined operations. Finally, he alluded to the significant fact that on the list of the Vice-Presidents of the Research Defence Society were eighty-seven of the leading clergy of the country, largely archbishops, bishops and deans. The "significance" of the movement, from his point of view, arose from the reflection that thinking men from that class of society would not lend their aid to the movement unless they felt satisfied that operations upon the lower animals were a necessity, and could not, therefore, be displeasing to the Almighty. And so, we are happy to think, will one day think the overwhelming majority of our cultured fellow countrymen.

### THE GREAT FATAL FIRE IN LONDON.

THE occurrence of a fatal fire in some large stores at Clapham Junction raises a number of pertinent questions in the interests of the public safety. The fire broke out in the afternoon, when the shops were not at their busiest, but, nevertheless, a number of lives were lost—it is estimated from ten to twenty—but the precise number may never be ascertained. The fire originated in one of the shop windows, and although gallant attempts were made to extinguish the flames, they spread rapidly until they involved the whole of a huge block of buildings. Now, there is a plain moral to this tragic story. Had the buildings been fireproof, or, to use a more accurate term, fire-resisting, the spread of the conflagration would have been proportionately slow, so that time would have elapsed for the fire-extinguishing brigades to have come to the rescue. In that way a lamentable loss of life and an enormous damage to property would probably have been averted. Surely an event of this kind may be described as, humanly speaking, avoidable, at any rate, as regards its more serious results, by the application of scientific knowledge. Why should not a huge modern building of this kind be made with fireproof floors? A provision of that kind is calculated to limit and control and retard the spread of a fire, if not to prevent it altogether. The Clapham Junction outbreak took place in the daytime, a far more favourable time for the chances of extinction than had it occurred during the night. Of recent years the London County Council has effected great improvements in the safety of factories and workshops by the provision of adequate exits and emergency stairs. There are many unsafe buildings where workpeople are employed which technically escape the operation of the Factories and Workshops Acts. Then, again, it is impossible to enforce structural precautions under the Building or other Acts in many old buildings, in spite of the fact that they may be so constructed as to form veritable death-traps in case of conflagration. An instance of this kind occurred in the year 1902 in the case of a fire in a rubber warehouse in Queen Victoria Street, in the City of London, where a number of workpeople lost their lives. It would be difficult to imagine a more fatal plan of construction than that which, on the outbreak of the fire, speedily cut off several floors full of employees from the ordinary and circuitous route of exit. The exact facts and circumstances of the Clapham Junction fire remain to be ascertained. Whatever the result of those inquiries may be, the question we have raised will remain unaffected. Why should not these huge industrial or industrial and commercial blocks be constructed of fire-resisting materials? The additional cost would not be prohibitive in extent, whereas, on the other hand, the gain to the security of all concerned would be almost incalculable. In the attempt to obtain greater security for citizens against fire, the London County Council have often had to face strenuous opposition on the part of property owners. It is to be hoped that in view of the serious fatal fires that have occurred within their jurisdiction, they will be enabled to present the legislature with an overwhelming case

for the necessity of amended and consolidated and extended legislation with regard to industrial and commercial buildings, or, for that matter, of all large buildings, public or private, within the metropolis.

### CURRENT TOPICS.

#### Scarlet Fever and Pasteurised Milk.

A STRIKING testimony to the value of pasteurisation of milk in the prevention of scarlet fever was given in a recent report issued by the Public Health Committee of the Lambeth Borough Council. An epidemic of the disease in question prevailed at Kingston, Wimbledon, Croydon and surrounding districts, including several in Westminster and south of the Thames. "In regard to the Lambeth outbreak," the report says, "it appears to have been limited to a public institution. The medical officer informs us that, in his opinion, the outbreak connected with infected milk would have been much more widely extended, had it not been for the fact that all milk used by the institution was pasteurised before use, except such milk as was to be used for cooking purposes." It appears that the inmates and patients at the institution escaped infection, although there were many susceptible persons—children, invalids, etc.—who partook of the milk at the time. It was the members of the nursing staff alone who were infected. The nursing staff occupies the nurses' home away from the rest of the institution. Inquiry showed that the milk used by the nursing staff was not pasteurised, although this fact was unknown to the management of the institution at the time, and that had it been so, even these cases of scarlet fever would doubtless have been prevented. The facts point to the value of all milk being pasteurised or sterilised before being consumed, milk being specially liable to infection both from human and animal sources. It would be difficult to devise a more conclusive experiment as to the transmissibility of scarlet fever by a specific virus conveyed in milk and destroyed by the process of pasteurisation.

#### Change of Air.

PERHAPS one of the oldest of all medical prescriptions is that known to us as "change of air." When a patient has passed through a sharp illness, who can doubt that his convalescence may often be shortened or rendered more complete by a visit to the seaside or to some wholesome inland resort? What else has made the reputation of so many spas and watering-places of all kinds and descriptions? It is, of course, the fashion to say that the change of air is only part of a "cure" at a health resort, and that other things equally potent are regular living and exercise, early hours, plain fare, and the absence of social and business worries. In spite of all that may be said on that score, the fact remains that there is something in the substituted air itself which seems to satisfy some demand of the debilitated system. When we come to know more accurately the composition of air and its radio-active and other less obvious activities, it is possible that the key may be found in the beliefs that in us lie as to the virtues attached to

"change of air." By some irony of fate, it is precisely the one prescription most difficult for the medical practitioner to apply to his own case, however supersaturated he may be with the air of one particular locality.

#### Women as House Surgeons.

SOME weeks ago we stated the fact that the Board of Management of the Manchester Royal Infirmary had carried a resolution against the admission of women to the post of house-surgeon. The resolution declared that in a general hospital the services of medical women are not, upon the whole, as valuable as those of men, and as the adoption of such appointments in their institution would entail building operations, and other causes of great expense, the Board would not be justified in making an experimental change not of advantage to the Infirmary. This resolution has created great dissatisfaction among the registered medical women of the district, and, aided by their own Association, several kindred organisations, and a considerable body of influential citizens, they have formed a committee with the object of obtaining a reversal of the Board's decision. The Committee urge that to deny to all women medical students in Manchester, the opportunity of holding resident posts in the Infirmary will tend to discourage women who desire to enter the profession, and will make the Manchester Medical School suffer by driving women to other places where more liberal views prevail. They insist that wider issues are also involved affecting the interests of the whole community. Without pretending to pass judgment on the question of expense, which the Board alleges as a chief ground for their adverse decision, or now deciding the question of the employment of medical women in male wards, it seems evident that, under normal conditions in a great hospital attached to a great medical school where women are educated, an opportunity ought to be afforded to all qualified students, regardless of sex, of obtaining, so far as possible, that experience in the position of house-surgeon which forms so valuable a termination to the student's career. In a hospital containing some hundreds of beds in the female wards, enough work for women house-surgeons could surely be found; and if, as it seems, the problem in Manchester be really, in the main, one of expense, it need not be doubted that her wealthy citizens will soon bring about a satisfactory solution.

#### Chinese Pork.

THE absolute necessity of a rigid control over the importation of Chinese pork has been amply demonstrated by a recent report upon the subject by the Medical Officer of Health for the City of London. Out of 2,131 carcasses dealt with, no less than 214 were condemned. It is somewhat of a shock to learn that 10 per cent. of Chinese pigs imported into this country are in a condition capable of spreading disease among consumers. A further danger has been revealed by the Local Government Board, which has issued information that consignments of pigs' stomachs have been sent from Hamburg packed in salt, and that some of these stomachs show signs of gastritis. The fact that they are used for sausage-skins suggests

a further lurid danger. Indeed, in our opinion, the whole matter of sausage-skins demands legislative treatment. The use of the intestinal canal of various animals for packing sausages opens up an obvious danger of infectivity by bowel organisms, especially when the sausages are eaten uncooked. Considering the revelations that are constantly being made about sausages, it is a wonder that their consumption has not dwindled long since to vanishing-point, as in the case of the incriminated oyster.

#### Scouting for Girls.

FOR some time past the organisation known as "Boy Scouts" has been gradually growing in popularity, and for this there are sound reasons. Whether we approve of the military spirit fostered by the movement or not, no one can deny that the open air employment, the observation of natural features, and the wholesome exercise, involved in scouting have a physical and educational value not to be lightly esteemed. It will be a surprise to many, however, to find that some of those concerned in the "Boy Scouts" movement, not content with teaching boys scouting duties, are also taking girls in hand for the same work, or play. According to a correspondent of the *Spectator*, girls of all ages from twelve to sixteen are sent on scouting parties with boys of the same age, and without any efficient supervision. They return home late at night after a long afternoon in the country, hot, tired, and in an excited frame of mind. It is not necessary to dwell on the physical and moral evils likely to spring from such conditions as these, or to emphasise the folly of those who encourage or permit them. The idea may perhaps have been suggested by the co-education movement which, as explained frequently in these columns, has achieved great success in highly organised schools under expert direction—a movement in no way justifying experiment such as that now referred to. We can hardly believe that General Baden-Powell and the other responsible heads of the "Boy Scouts" movement are to answer for the "Girl Scouts," and we are sure that now that the matter has been brought to their notice, their influence will be sufficient to put a stop to a movement even more dangerous than it is silly.

#### As Others See Us.

THE hospitality of one of our professional contemporaries has given the opportunity to Mrs. Hodgkinson, editor of the *British Health Review*, to express her frank opinions of our profession. Her criticisms are, on the whole, framed in courteous terms, and are deserving of some attention, in that they represent the attitude of the ignorant and somewhat careless man-in-the-street, when he wants to have a grumble. The intention so obviously is to grumble rather than to suggest reforms, that we come away less instructed than we had hoped to be. In so far as Mrs. Hodgkinson's criticisms are well founded, she voices what we all know, only too well. She deplores, as we all do, the treatment of symptoms, but what she does not see is, that in some cases we can find nothing but symptoms, and the patient, very naturally, expects to have them treated. She objects to the specialisation of medical work, and in turn demands much more rigorous consulting-room methods than at present:—"These (so to speak) drawing-room methods should be discarded in favour of a really searching examination, including blood counts, test meals, and many other means." But even the consultant cannot be an all-round specialist, for there is a limit to the work a man can do well. On

the question of fees, Mrs. Hodgkinson is annoyed equally with the operating surgeon, who wants his fee at once, and with the general practitioner who sends in his bill half-yearly. When she complains that the fee for a surgical operation "in no sense represents its actual, though it may its market, value," we do not quite understand, unless, indeed, she is stating the platitude that health is invaluable. We cannot follow Mrs. Hodgkinson in all her criticisms, but we would point out to her that her most offensive suggestion, to the effect that it is to the interest of medical men to prevent good health, is met by her own admission of the excellence of the work done by the medical officer of health.

### PERSONAL.

THE QUEEN has sent chocolates to Sir William Treloar for the inmates of the Cripples' Home at Alton.

PRINCE ALEXANDER OF TECK has sent a donation to the funds of the Margaret Street Hospital for Consumption.

MR. WILLIAM PEARSON has been appointed Assistant Surgeon to the Adelaide Hospital, Dublin.

MR. HENRY PHIPPS, the steel merchant, has given the sum of £100,000 to the University of Pennsylvania for medical and surgical research purposes.

THE St. John's Hospital for Diseases of the Skin has received a donation of £500 for the naming of a ward to be called the "Annie Zunz" ward.

SIR WM. THORNLEY STOKER, M.D., has been appointed Inspector of Schools of Anatomy in Ireland, in the room of the late Sir Wm. Thomson, C.B.

AT the Clerkenwell Police Court, Achilli Mompaldo, a registered medical practitioner of the Italian quarter, was fined 30s. for failing to notify a case of puerperal fever.

DR. THOMAS ADRIAN GREENE, Resident Medical Superintendent of Carlow District Lunatic Asylum, was sworn a Justice of the Peace for the County of Carlow.

THE Paris Pasteur Institute has had its expenses increased by £400 a year by reason of the increased duty put on alcohol by M. Caillaux when Minister of Finance.

DR. FRANCIS WARD stated, on December 22nd, at the Royal Photographic Society, how fish can be successfully photographed, if first put under the influence of chloroform.

THE following have been appointed Justices of the Peace:—Dr. George Black, of Tomintoul; Dr. William R. Duguid, jun., of Buckie; Dr. John S. Findlay, of Glenlivet; and Dr. Alfred D. Vardon, of Gardinstown.

DR. J. DUNCAN LOVE, who is leaving Newcastle-on-Tyne after fourteen years' work to take up practice at Monkseaton, was presented with a silver tea-tray and caddie by grateful patients on December 21st. Sir William Angus, J.P., made the presentation.

THE London committee of management for the public health section of the Japan-British Exhibition at the White City for 1910 includes Professor H. E. Kenwood and Colonel J. Lane Nottter, and sub-committees are to be formed in many of the great industrial and mercantile centres in Great Britain and Ireland.

OWING to the Christmas holidays, our Irish SUPPLEMENT will not appear this week.

# A CLINICAL LECTURE ON THE TREATMENT OF CONGENITAL TALIPES EQUINO- VARUS IN INFANTS. (a)

By WALTER C. STEVENSON, M.D., B.Ch.,

Surgeon to the Orthopædic Hospital of Ireland, Dublin.

BEFORE entering on the details of the treatment of congenital talipes equino-varus, I think it would be an advantage to let you know the *rationale* of the routine which Mr. Swan has adopted and carried out, with the most satisfactory results, at the Orthopædic Hospital for the last thirty years.

The treatment is essentially a gradual rectification of the deformity until over-correction is well established. During its progress one principle must be constantly borne in mind, namely, that once the treatment is begun, the foot should never be allowed for one instant to go back to its original shape, or even to a less-corrected position. Treatment should be continued until this tendency to relapse has been completely overcome.

Briefly, the conditions we find in the foot, or more commonly in the feet, of a child born with this deformity are:—(1) A *Varus*, or bending inwards, and a supination of the anterior segment of the foot, taking place to a large extent at the medio-tarsal joint; and (2), an *Equinus*, which mostly affects the ankle-joint. The *Varus* deformity is more tedious to cure, and it is found by experience much easier to rectify this before any attention is paid to the *Equinus*. The tense *tendo Achillis* gives great stability to the foot during the application of the correcting forces. When the *Varus* is cured it is a more simple matter to overcome the *Equinus*.

There are two procedures employed in each deformity, the tenotomy of resisting tendons, and the manipulation of the foot. The major part of the treatment consists in the manipulation, which, under ordinary circumstances, in this hospital is carried out by the sister or a trained nurse. Nevertheless, by dividing certain tendons, the time required to obtain the result aimed at is shortened, and the likelihood of recurrence minimised. The sequence of events is, therefore, as follows:—(1) Tenotomy of the posterior and anterior tibial tendons; (2) manipulation of the foot until the *Varus* condition is completely corrected, or, rather, over-corrected; (3) tenotomy of the *tendo Achillis*; (4) correction of the *Equinus* by manipulation and the night-shoe; (5) teaching the patient to walk properly.

It is the practice here to commence the treatment as early as possible; preferably, in a healthy child, when it is a fortnight old. Anyone handling an infant's foot will at once appreciate how easily it can be twisted into any shape, and, at the same time, how quickly it will spring back to its original position. All the tissues are much more pliant than in an older subject. If one considers an X-ray photograph of such a foot, it becomes strikingly evident that there is little bony matter in the tarsus, which consists for the most part of cartilage; the central portion of the os calcis, and to a less extent the astragalus, are represented by small globular nodules of bone, and the cuboid is just beginning to ossify. The centres for the external, middle and internal cuneiforms appear in

that order during the first, second and third years, and the scaphoid still later. From this point of view, the advantages of early treatment are obvious. Resection of bone is out of the question, as there is little or no bone to resect. In the course of a few weeks the foot can be moulded so as to present a normal appearance. When the infant grows older he will learn to use his feet as does an ordinary child. This result is accomplished without sacrifice of the bony architecture or shortening of the foot. Cure is also effected in a much shorter time in early cases. The little patient is caused less inconvenience and discomfort than the older child, and, at least, is spared the terrors of anticipation each time the foot is about to be manipulated.

Nearly all the city infants presented here are treated in our dispensary as out-patients. This arrangement is not so satisfactory with older children, as they require constant watching to prevent them from disturbing their bandages. If the case is taken in hand soon after the mother can get about, and while she is still unfamiliar with and distressed on account of the abnormality of her offspring, she is more likely to be regular in her attendance, and to be encouraged, rather, by the comparatively rapid improvement which she sees from day to day. By watching the treatment, most mothers, with a little training, learn to manipulate the feet themselves, so that they are able to take an intelligent interest in the case. They may usually be entrusted with such subsequent care of the feet as will ensure the correct position being maintained until the child is well able to walk.

I now propose to discuss some of the details of treatment. With the usual aseptic precautions, the posterior and anterior tibial tendons of one or both feet are divided at one sitting with a fine, sharp-pointed tenotome. The nurse can keep the limb absolutely quiet by pressing the knee backwards with the tips of the fingers placed on the quadriceps extensor, just above the patella. To cut the posterior tibial tendon, the leg, lying on its outer side, is held with one hand placed beneath it. The tenotome is entered at right-angles to the middle of the inner surface of the leg, and the blade, as it is passed in, is parallel to and just grazes the inner border of the tibia. If introduced properly, the tenotome will stand by itself, being held against the posterior surface of the tibia by the tendon. The edge of the blade is now turned towards the tendon, which is stretched and severed over it by everting the foot. Similarly, the anterior tibial tendon is dealt with by passing the tenotome directly towards the bone through the anterior annular ligament, immediately external to the tendon. This is then picked up by passing the blade horizontally inward under it, and cut as before. A pad of a double fold of sterilised lint about half an inch square is placed on each puncture, and held in position by strapping. Then a flannel bandage is applied to the foot and leg. Beginning at the inner margin of the foot, it is

(a) Delivered to the Post-Graduate Class of the Royal College of Surgeons of Ireland at the Orthopædic Hospital, on October 6th, 1909.

brought beneath the sole and across the dorsum, because its application in this direction is an important adjunct in maintaining the correct position. A malleable splint made of hoop-iron, padded with tow and covered with calico, is so bent that, when it is bandaged to the inner side of the foot and leg, it will correct the *Varus* to a slight extent.

The bandage and splint are not disturbed for four or five days. These and the dressing are then removed, and the foot gently manipulated, after which the bandage and splint are re-applied. As the foot improves, the splint is placed on the outer side of the limb, and is bent gradually until the foot can be retained against it in the *Valgus* position without undue strain.

The *technique* of manipulating the foot to the best advantage is easily acquired if a few practical points are attended to. Of these, the most important is to keep the ankle well fixed, so that the correcting forces may not be dissipated in moving the ankle, and also in unnecessarily stretching the ligaments round that joint. The leg should be kept steady by an assistant, as before described. The anterior part of the foot should be brought by a circular motion to a position of *Valgus* and pronation, so that the sole looks outwards and forwards instead of inwards and backwards. If the right foot is being manipulated the right hand is placed behind the heel, and grasps the malleoli, the os calcis and the astragalus. The thumb is along the tibia and points to the knee. The fingers are along the fibula, and are more or less parallel to one another. The palm of the left hand is against the sole, the thumb on the dorsum, and the web of the thumb presses against the inner margin of the foot behind the head of the first metatarsal bone. This arrangement of the hands gives great power in untwisting the foot. When the untwisting movement has been performed several times, the right hand is slipped down somewhat to the inner side of the foot to keep up the *Valgus* position, while the head of each metatarsal bone is pulled in an outward direction with the fingers of the left hand. This tends to spread out the foot and to stretch the ligaments at the bases of the metatarsal bones.

Manipulation is continued once or twice daily until the *Varus* is completely corrected. This may take from two weeks to two months or more, according to the age of the child, and the regularity and the efficiency of the manipulation and bandaging. Once the *Varus* is completely corrected the foot will remain in the *Valgus* condition when left to itself. Also, when manipulated into the *Valgus* position the skin on the inner side of the foot will not blanch, showing that it has been sufficiently stretched.

The *tendo Achillis* may be divided subcutaneously from either side, but it should be cut well above the insertion. A pad is applied as before, and the splint, slightly bent opposite the ankle, is placed along the anterior aspect of the limb; there is little danger of producing flail foot, an accident which may very easily happen in paralytic cases, as the shortened posterior ligament of the ankle will not permit of immediate correction of the *Equinus*.

After four or five days the foot is again manipulated daily, but now, in order to bring down the heel, the movement of dorsi-flexion of the foot is superadded to those already described. Two or three days later, the splint, which has been in use from the commencement of the treatment to maintain the foot constantly in proper position, is discarded for Swan's night-shoe. This apparatus is simple, inexpensive, and, when properly applied, most efficient. It serves to complete the cure and

to prevent the recurrence of the deformity. It consists of a U-shaped metal trough, extending from the heel two-thirds of the way up the back of the leg, with a flat, immovable foot-piece welded on at right-angles to it. At the lower end of the leg-piece there is a shaped gap, through which the back of the heel can project comfortably. The whole shoe is covered with chamois leather. On the convex surface of the trough, to the inner side of this opening, a strap is fixed near the foot-piece. Its buckle is in a corresponding position on the outer side of the heel-gap. The foot is bandaged as before, and placed in the night-shoe, with its whole plantar surface in apposition with the foot-piece, the back of the heel projecting a little behind. The strap is brought forward through the gap, between the inner side of the ankle and the trough, across the front of the ankle, back between the outer side of the ankle and the trough, through the gap, and buckled off on the outer side. This strap holds the ankle firmly in position. For the first week or so, until the *Equinus* is to some extent corrected by manipulation, it is not advisable that too much pressure be exerted in attempting to keep the sole flat against the foot-piece. There is another strap round the leg to hold the trough in position. The night-shoe is then bandaged on from above downwards. Any degree of eversion of the anterior part of the foot may be obtained by passing the bandage downwards across the inner side of the foot, outwards beneath the sole, and by pulling it round the outer edge of the foot-piece, the ankle being fixed as before described. For two or more months the night-shoe should be worn constantly, except when the foot is being manipulated; subsequently it is put on only at night-time, and is kept in use till the child begins to walk.

The child with club-foot should not be encouraged to crawl, as the pressure on the dorsum of the foot tends to increase his deformity, while standing or walking helps to maintain his foot in good position. The cage, which consists of a small upper hoop, and a large lower hoop to which casters are fixed, is very useful at this stage. The upper hoop to some extent supports the child's weight, so that it can get about along the floor by using its feet as in walking.

When walking, these patients very often have a habit of turning in their feet. The reason of this is obvious when one remembers that the inward twist of the limb is not confined to the foot and ankle alone, but affects the whole leg. Swan has pointed out that the total deformity is an atavism, being the same as the condition which normally exists in the anthropoid apes. As in the latter, we find that the external malleolus is situated more to the front than in the normal human leg. In fact, to remedy this defect, he has devised an operation wherein the tibia is divided in its lower third, and the foot is then rotated outwards, carrying back with it the external malleolus. Another method of dealing with this inversion of the leg is by the use of Barwell's artificial muscles, applied so as to reinforce the peronei. But usually the tendency to turn in the feet while walking may be overcome by careful training. I have found that the simple expedient of bandaging both feet, with their outer sides against one long splint placed at right-angles to the limb, is an effective method of dealing with most of these cases. The splint need only be applied for a few nights to bring about the desired result.

At first the child is made to walk about in its stocking feet. Afterwards, especially in late cases, it is often necessary that he should be provided with a *Varus* boot. This has an inside steel, hinged at the ankle, extending from the heel to just below



the knee. To the outer side of the foot is attached an external malleolar strap; this is buckled over the steel, and tends to keep the sole everted. Sometimes it is only necessary to reverse ordinary boots, the child wearing the right boot on the left foot, and *vice versa*.

What I have said up to the present is specially applicable to the treatment of young children; but after the age of two or three years the plantar fascia frequently requires division; and manipulation is greatly aided by the occasional wrenching of the foot with Thomas's wrenches, the patient being under an anæsthetic. The application of a plaster of Paris bandage to hold the foot for a week or so in as good a position as can be obtained is a useful procedure after wrenching. Resection of bone is seldom resorted to here, except in patients over eight years of age. From the outer border of the foot a small wedge of bone is removed, consisting of the spur of the fifth metatarsal and the anterior part of the cuboid. The cure can then be completed by wrenching and manipulation, for in these cases there is always an osteoporosis and atrophy of the tissues.

In conclusion, I would emphasise the fact that, in order to render the limb serviceable, in congenital talipes equino-varus, even in adolescent patients, we rely more upon the gradual wrenching and manipulating the foot into shape than, by an extensive resection of bone, upon attempts to rectify the deformity.

NOTE.—A Clinical Lecture by a well-known teacher appears in each number of this Journal. The Lecture for next week will be by William Thorburn, F.R.C.S., B.Sc.Lond., Hon. Surgeon to the Manchester Royal Infirmary. Subject: "Some Points in Connection with the Surgery of Gall-Stones."

## ORIGINAL PAPERS.

### THE DIGESTIVE DISTURBANCES OF RICKETS.

BY PROFESSOR A. B. MARFAN, M.D.,

Physician to the Paris Hospitals.

[SPECIALLY TRANSLATED FOR THIS JOURNAL.]

THE osseous deformities of rickets may be met with independently of any notable constitutional disturbance, though this is exceptional. The skeletal changes are almost invariably accompanied by sundry visceral troubles, anæmia, a certain degree of muscular debility, occasionally by nervous symptoms and usually by profound disturbance of the general nutrition. The frequency and intensity of these concomitant disturbances appear to justify the view that rickets is not a disease affecting only the bones, but that it is rarely a constitutional malady, *totius substantiæ*.

As soon as we try to define the relationship of these disturbances to the rachitic disease, however, we meet with difficulty. The connection between rickets, and this or that disturbance, may conceivably be of the nature of a fortuitous coincidence, a fertile source of error in observational science, even if we succeed in establishing a relationship other than coincidence between rickets and some particular state, it remains for us to find out whether the latter is the cause of the rickets or whether the state and the rickets are not both the outcome of a common cause, and this is often far from easy.

We have endeavoured to ascertain to what extent this is possible in respect of the concomitant phenomena of rickets, with the following results.

As a rule rickets is associated with disturbances of digestion, and on this coincidence is founded the most generally received conception of its ætiology. Yet these disturbances have not hitherto received much attention and their history is still somewhat obscure. For some years past I have been collecting data from private and hospital practice, and though cases are less frequently met with in the former they are more instructive than the latter, because we are in a better position to find out the antecedents and to watch the course of the disease.

These researches show that there are cases of rickets in which digestive disturbances are conspicuous by their absence but, as already pointed out, such cases are rare, more or less previous digestive disturbance being the rule. The disturbances may be divided into two groups: (1) Digestive disturbances that precede and accompany the onset of rickets, *i.e.*, the osseous changes, and (2) the dyspepsia of confirmed rickets.

The commonest form of the premonitory digestive disturbances is recurrent catarrhal gastro-enteritis. This may date from the commencement of life. The earliest symptom is diarrhœa, characterised by frequent motions—five or six in the 24 hours—these are liquid, grumous, green or mixed (a mixture of green, yellow and white matter) transparent and somewhat gelatinous. The diarrhœa may be accompanied by vomiting and a butyric odour of the breath. There is often some tympanites and vesicular erythema of the buttocks, possibly a slight rise of temperature, never however exceeding 101 deg. F.

Sometimes mild, sometimes pronounced, these disturbances last several days or a week or two seldom longer. This stage is followed by a period of calm, then we get a fresh outbreak, and so on for weeks or months.

In the intervals it is to be noted that the digestive functions do not return to normal for the dyspepsia persists more or less according as the infant is being brought up at the breast or otherwise. If bottle-fed, which is usually the case, the stools are light-coloured, soft, two or three a day, or there may be slight constipation. Even in the breast-fed infant the stools are still somewhat frequent, rather more liquid, and less homogeneous than normal. In both there is occasional puking and sickness.

Meanwhile the child does not gain in weight, indeed, may even lose flesh. The general health is possibly not very obviously affected, but it may happen that one of these attacks assumes the form of infantile cholera, in which case the loss of weight is very marked and the infant remains feeble for some time after.

It is in the course of this chronic dyspepsia that the first bony deformities usually make their appearance, between the sixth and twelfth months of life. During the initial stage the digestive disturbances persist for a time, but sooner or later they undergo a change.

In less frequent cases the digestive disturbances that precede rickets assume the form of dyspepsia with frequently repeated attacks of vomiting, obstinate constipation and retraction of the belly, or there may be spasmodic catarrh of the whole alimentary canal.

As the disease proceeds the digestive disturbances take on a different form, peculiar to this stage. The characteristics of the dyspepsia of confirmed rickets are the following: the appetite is capricious, there are periods of anorexia followed by periods of voracity. If we listen over the stomach after food has been taken we can elicit a distinct splashing sound, there is in fact a state of hypopepsia with abnormal fermentations.

The rickety artificially-fed infant is usually constipated and expels dry motions with some difficulty, the motions being hard, white, foetid and often laden with phosphate of lime. In the breast-fed infant the motions may be normal, but here again there is usually constipation with marked fœtor.

As these symptoms and the osseous changes progress the abdomen becomes large and flabby. It is resonant on percussion, but the resonance is muffled, very unlike that of tympanites.

This flabbiness of the belly is accompanied by more or less pronounced elongation of the intestines which become thinned, especially in respect of the muscular coat, in fact there is relaxation of the muscular walls.

This state lasts as long as the rickets, and does not improve until the latter begins to subside.

It will be seen then that two kinds of digestive disturbances are met with in connection with rickets. The first, prodromal or initial, belong to the category of recurrent gastro-intestinal catarrh, the second, a special form of atonic dyspepsia with a big, flabby belly.

Now these two forms do not represent two successive phases of the same process, the dyspepsia of confirmed rickets is not the effect, the natural consequence, of the premonitory catarrhal enteritis, in fact, they are independent of each other. This is shown by the fact that rickets may supervene in infants whose digestion is apparently normal, the symptoms of rickety dyspepsia not supervening until the disease is well advanced.

The form of dyspepsia associated with the big, flabby belly is virtually peculiar to rickets, and it is not difficult to understand its causation. The intestinal elongation and the big, flabby belly are, indeed, only part of the general muscular atony associated with rickets.

The preliminary catarrhal gastro-enteritis is usually the consequence of improper feeding, especially ill-digested milk. We have remarked that these preliminary digestive disturbances do not necessarily precede the onset of rickets, but they are too frequent for there not to be some connection between the two.

The general view of the causation of rickets, is that it is due to improper feeding, so that the premonitory dyspepsia and the osseous changes are regarded merely as successive effects of the same cause. This view, however, must be modified to meet the difficulty raised by the occurrence of rickets in breast-fed infants whose feeding is not open to criticism. It would seem indeed, that digestive disturbance, of whatever origin, may determine rickets, and if the disease be more frequently met with in bottle-fed infants this is due merely to the fact that digestive disturbances are more liable to occur under these artificial conditions.

This view, however, is only true in part, for I am satisfied that rickets may be due to causes other than defective alimentation. I have met with cases of rickets in breast-fed infants without any previous history of digestive disturbance, so that in such cases the rickets could not possibly be ascribed to gastro-enteritis or dyspepsia.

Now it is unquestionable that rickets is far more commonly met with in bottle-fed infants than in the breast-fed, yet I am far from convinced that artificial feeding is *per se* capable of inducing rickets. I believe that this only plays the part of a predisposing agent. The primary cause of rickets is to be found in all forms of chronic intoxication, occurring at a certain phase of ossification and hæmatopoiesis, a phase that extends from the last months of intra-uterine life to the end of the second year of extra-uterine life, during which the modi-

fications of the bone marrow, provoked by these diseases, may interfere with the building up of bony tissue. If we inquire closely into the antecedents of a rickety subject, it is very rare not to discover some infection or chronic intoxication underlying the origin of the bony deformities. The infections that we have met with in this connection are: chronic toxi-infective digestive disturbances, either acute or recurrent, hereditary syphilis, protracted broncho-pneumonia and chronic pyodermitis. These causes are the more active when they are operative in a predisposed subject, and one of the most powerful predisposing causes is unquestionably artificial feeding and heredity, plus unwholesome surroundings and deprivation of light and fresh air.

This explanation is the only one that accounts for all the facts in connection with rickets, notably its occurrence in breast-fed infants free from any preliminary gastro-enteritis. There must be concurrence of several factors for the production of rickets, foremost among them being chronic infection and predisposition.

## GENITAL TUBERCULOSIS.

By PROFESSOR LÉGUEU,

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[SPECIALLY REPORTED FOR THIS JOURNAL.]

Most frequently met with in adults, genital tuberculosis may attack any part of the reproductive apparatus.

It reveals its presence by purely objective signs. It may take the form of an attack of acute epididymitis, coming on quite suddenly, sometimes without any apparent cause, sometimes following a blow or an effort of some kind. Or there may be a running from the urethra independently of any previous history of blennorrhagia, the discharge consisting of serous, grumous pus, this variety being almost invariably associated with lesions of the prostate or seminal vesicles. Lastly we may get chronic tuberculous epididymitis, the form most frequently met with.

The tail of the epididymis is always the first to suffer, never the head. It becomes tubercular, and circumscribed areas of hardness can be felt on its surface. As a rule the disease runs a painless, indolent course, though in cases in which the disease develops more rapidly there may be some pain.

No adhesions can be made out unless there be threatening suppuration, or when it has already suppured, or in presence of a fistula. The tunica vaginalis is often distended with fluid in variable amount, constituting a form of hydrocele; this may accompany tuberculous epididymitis, or it may complicate tuberculosis of the testicle itself. The latter form, which results from infection of the blood, attacks the parenchyma of the gland, disseminating a few isolated tuberculous foci that give no outward and visible sign of their existence. It is only on cutting through the testicle that we discover these internal tubercles which explain the occurrence of hydrocele of the essential form, so-called because the actual cause of the trouble eludes our observation. The vas deferens is affected in its course, but more particularly at its termination. Above Scarpa's triangle it may be felt as an indurated cord (peridiferentitis). Tuberculosis of the prostate is not painful, tender, or increased in size. The prostate contains a number of circumscribed isolated hard nodules, perceptible on palpation. The seminal vesicles, which suffer most damage at their orifices, feel hard, as if injected with tallow.

Genital tuberculosis may lie latent for years in its

course towards suppuration. Deeply-seated lesions, as in tuberculous prostatitis, are more apt to suppurate early. When suppuration takes place we get a whole series of secondary infections, cavities, fistulæ, etc. Nevertheless, the disease is curable in favourable cases, although it constitutes the gravest form of localised genital tuberculosis. In the epididymis and prostate the little indurated nodules remain perceptible on examination, but the caseous matter is gradually replaced by fibrous tissue. In blennorrhagia the areas of induration, on the contrary, end by disappearing. It is unnecessary to add that if the kidney and lungs are attacked concomitantly the disease is thereby greatly aggravated, more, however, on account of its generalisation than by reason of its localisation in the genital organs.

Patients suffering from genital tuberculosis come to consult us under three different sets of conditions: It may be on account of the urethral running and loss of flesh. We must begin by excluding blennorrhagia and its complications and consequences. Having done this, we may contemplate the possibility of its being due to tuberculosis. In other cases there is a perinæal fistula, discharging either in the perinæum or near the urethra. Rectal examination and the introduction of a sound will enable us to discover the cause of this in deeply-seated suppurative lesions of the prostate. Lesions of the testicle may be masked, as already shown, by the existence of hydrocele, the effusion into the tunica vaginalis being consequent upon epididymitis or central tubercle, the latter eluding the ordinary methods of exploration. In presence of a voluminous hydrocele, when palpation of the epididymis, which is placed behind, is not practicable, we must carefully examine the testicle on the opposite side. The presence of nodules on the epididymis will clinch the diagnosis, while rectal examination will settle the question whether the prostate is involved.

The diagnosis is by no means always easy. Various difficulties may present themselves. In some instances we get a history of acute epididymitis following a blow or an effort. This detail is one of very great importance, for we must not attribute to the traumatism what in reality is dependent upon the tuberculosis. As a matter of fact, there is no such thing as orchitis from strain. What we really get is tuberculous epididymitis that has become acute following a strain. This remark also applies to direct traumatism. The latter may, no doubt, determine a certain degree of congestion, but how are we to explain the localisation of the traumatic inflammation in the epididymis? The conclusion to be drawn is that traumatism *per se* cannot determine orchitis.

When the tuberculous process attacks the epididymis the diagnosis has to be differentiated from blennorrhagia, and this is not invariably an easy matter. We need not refer to syphilis, since no confusion is possible in this connection. When syphilis involves the epididymis it attacks the head of the organ, whereas, as I have pointed out, tuberculosis attacks the tail. Tuberculosis and blennorrhagia, however, both attack the tail of the gland, so that we cannot rely on the localisation, which is the same in both instances, to guide us. Some importance attaches to the insidiousness of the onset and the indolence peculiar to tuberculosis, but one meets with cases of blennorrhagic epididymitis that run a latent, painless course, for all cases of blennorrhagic epididymitis are not accompanied by pain. The element pain, therefore, does not help us very much in distinguishing between tuberculosis and blennorrhagia. It is claimed that the existence of adhesions militates in favour of

tuberculosis, and no doubt this is true as far as it goes, but, apart from imminent or actual suppuration, there are no adhesions. Nor do the lesions of the vas deferens assist us materially, because although there is inflammation of this canal in tuberculosis this is also met with in blennorrhagia.

In short, there are only two signs that justify the diagnosis, viz., the state of the urethra and of the deep parts. A healthy urethra that only discharges a drop or two of liquid after the ingestion of irritating fluids, such as beer, cannot conceivably be blennorrhagic. If necessary, we must look for the gonococcus under the microscope, and when it is absent we may conclude in favour of tuberculosis. Rectal examination will enable us to discover nodules of tubercle in the prostate, if present, so that, having excluded blennorrhagia, the diagnosis becomes easy.

The treatment is purely medical. A season at some watering-place—Biarritz, Salies de Béarn, etc., along with the usual tonic medication, will often greatly improve matters. One sees cases of tuberculous epididymitis in which the induration retrogress and disappear in the course of a few weeks, the patients returning completely cured. Castration, which used to be recommended in this affection, is a detestable operation, for it is quite insufficient, seeing that it does not prevent the spread of the disease, while it is excessive in that it entails removal of a testicle which may turn out to be healthy. At most, in presence of fistulous lesions, we might intervene for the purpose of removing the epididymis. This partial operation has the advantage of removing the diseased tissue while leaving intact the internal secretion of the testicle. As for prostatectomy and removal of the seminal vesicles on account of tuberculous disease it is extremely rare for either of them to be necessary or desirable to have recourse thereto.

## THE CONTAGION OF LEPROSY.

By ALBERT S. ASHMEAD, M.D.,

Canadiensis.

As a strong advocate for the absolute separation of the new-born from their leprous parents, I may perhaps be permitted to observe that, while the statistics of percentage of contamination which Dr. Sand presented to the Bergen Second International Leprosy Conference (quoted in an editorial of Oct. 30th) is apparently "small," there is still much danger of contagion to every child left to the care of its leprous mother.

It may here be pointed out how those statistics of Dr. Sand may be misleading, because 138 leprous mothers had, among their 533 children (even when all were born after the women had become leprous, only 56 leprous offspring might only mean that enough time had not been given to all of them for the development of the contamination, which might remain with them, in fact, all their life. While I do not believe much in direct transmission of leprosy, unless other factors are present besides the inoculation of the germ, I certainly do believe that some intermediary host, which, perhaps, only momentarily could carry the germ, has a thousand times more chance to inoculate a child in arms, and otherwise most closely associated with its maternal focus of possible contamination, than perhaps it could in any other close family associations of two individuals, one well, the other infected.

What surprises all of us most is not the mere fact of realisation of the contagion, but the difficulty of explaining the immunity of any human body, and especially a child of a leprous mother, in spite of contagion. Some of us believe that this

last is due to the human milk diet, for no child, while at the breast, ever became a leper.

Varigny has well said: "In order to understand this, we must take into account that microbial diseases develop under two conditions: it is necessary that the microbe be living in good state, and that it penetrates into the organism under favourable circumstances." There is also required some predisposing medium *chemically* adapted to the life and nature of the microbe. This medium no doubt varies according to difference in epochs, races and climates, affecting perhaps the presence and activity of some intermediary host, and for the same reason immunity may be present in a body already inoculated, and remain so for years, until the individual requirements for the development of the virulent character of the living microbes present themselves. Then, and not till then, leprosy appears, and we say this one is a leper, although he was not known as such from the moment of his inoculation to the later real manifestation of symptoms of the disease. Or the organism may change, or lose altogether its resistance to the development of the germ into activity within a short period in after-life of the individual, and remain more or less, or absolutely, inert, as it surely does from birth to two and a half or three years of every infant's life. Hence the difference in resistance to contagion; hence the exceptional facility which it finds in certain cases, regardless of age. Here we have also some light thrown on those cases in which the contagion has met with such difficulties that some physicians have been tempted even to deny it altogether.

Are the statistics quoted from Sand any more important than those percentages that might be quoted concerning children born of, or in close association with, syphilitic mothers or of consumptives? Not one bit.

In 1898, Dr. Sand, in reply to my inquiry, wrote me of a carpenter who became a leper in Chicago. I thoroughly investigated this man's contagion. He afterwards died a leper in Reitfardet Asylum, Norway, under Dr. Sand's care. He had come to this country from a non-leprous family; even his home district was not leprous, and he lived for twelve years in a Norwegian boarding-house in Chicago before becoming even an incipient leper.

Sand and I both determined, after the fullest investigation by Sand in Norway and myself in Illinois, that he had become contaminated in Chicago. And although he may have carried the germs all those twelve years, or perhaps more after Norwegian inoculation, before he had emigrated, yet we determined that he got his disease in Chicago, probably through his own countrymen's habit of importing old clothes from Norway, in which possibly leper bacilli were still living in free existence, or perhaps carried by a *louse* as intermediary host.

At any rate, if he did not get the contagion in Chicago, he had certainly carried the germs in his own flesh *safely* for at least twelve years.

In 156 patients of Sand's in his asylum, 90 were tubercular lepers and 66 anæsthetic. In these last the risk of contagion from a leprous mother to her child would be scanty. And yet it might happen, for we are still ignorant of the exact method of transmission of the germs. Dr. Sand formerly was of opinion that leprosy is contagious, "just like phthisis is," and he believes that the bacilli may lie dormant in the system "for as much as twenty years."

But the most important part of Dr. Sand's former opinion was, that "children and old people are most liable to contract leprosy"; and that

these, "*especially the children*," should be "*especially protected*" against contagion.

He thought that there is something in the system which "may stir the bacillus into activity"—"in one year or twenty after inoculation." Or perhaps it might never be stirred into activity.

Sand's more recent statistics do not affirm that leprosy can absolutely *not* be communicated from a mother to her child. And even if he believes that the disease is not contagious "from individual to individual," he surely must still believe in contagion. And his statistics now, in fact, only more strongly confirm the necessity of *absolute separation of children at birth from their leprous parents*, to save those very 56 children of the 138 leprous mothers from the surely possible contamination; for a percentage of 56 of child-infections out of 533 is *much greater than that by any other special association in the family life*; and we all must admit that this disease spreads itself mainly by family contagion of some sort or other.

### THE CHILD CRIMINAL. (a)

By W. C. SULLIVAN, M.D., R.U.I.,

Medical Officer, H.M. Prison, Holloway.

WHEN the Committee of this Society did me the honour of asking me to open a discussion on the Child Criminal, I did not accept the invitation without a full sense of the responsibility I should incur in venturing to address an audience of experts on a subject of which I can pretend to know only one narrow aspect, and that aspect very imperfectly. But though I thus realised to the full the difficulties of my task, I did not feel that I should be justified in refusing to do what little lay in my power to help in bringing forward for the specific consideration of your Society a question, the solution of which, I am convinced, can only be found by the combined efforts and the combined knowledge of the educationalist and the student of criminology.

It is hardly necessary to say that anyone who has constantly to deal with the adult criminal is forced by his daily experience to think a good deal and to inquire a good deal about the child from whom that adult has developed; and as a result of his thinking and his inquiries he will most probably come to a conclusion which is not of very startling novelty, namely, that amongst the criminals whose history he has investigated there are some whose native disposition made it almost inevitable that they should become criminal, and others, on the contrary, who became criminal merely because circumstances gave that direction to their normal aptitudes. While of others, again, and these the large majority, he will find it hard to decide whether temperament or accident had most to do with the result. According to this view, then, though it often happens that the child who grows up to be a criminal is simply an ordinary child with the average endowments of his fellows in character and capacity, it may be, on the other hand, that he is a child whose conduct from quite early in life reveals an abnormal temper and very often a defective intellect, so that he is marked out almost in infancy as belonging to a morbid, a degenerate type. It is children of this latter sort that we ordinarily mean when we speak of criminal children; and in accordance with that common and convenient interpretation of the term, is to the examination of the characteristics of such moral defectives that I propose to devote the greater part of the present paper. As a preliminary, however, to the consideration of this main theme, it will, I think, be desirable to invite your attention for a few moments to some points bearing on the general question of criminal tendencies in childhood and youth, which will help us to see our special subject in its true perspective and to grasp the relation of abnormal development to criminal habits.

(a) Read at a meeting of the Child Study Society, November 18th, 1909.

In this connection we have first to take note of the obvious truth that in a certain sense every child is, and ought to be, a criminal. What I mean is, of course, that most of the conduct which we should term criminal in an adult is the result of quite normal impulses, and we only qualify it as criminal because in the given circumstances these impulses ought to have been inhibited, held in check by moral and social restraints; so long, therefore, as these restraints are feebly or imperfectly organised, as they are in the child, the impulses will naturally issue in accordant conduct, whether that conduct, judged by adult standards, is culpable or not. Take, for instance, the impulse which accounts for an overwhelming proportion of the total volume of crime, that is to say, the acquisitive impulse. We have only to watch the play of that impulse in the average baby to be convinced of the strength of our natural aptitudes for thieving. And if we now, with this impression fresh on our minds, turn to a later phase of development, when the baby has become a youth and has reached an age which makes him amenable to legal punishment, though his growth is still unfinished and his power of control over his impulses is still weak and uncertain, we see that the failure to restrain this acquisitive impulse is the cause of a great deal of conduct which is, in fact, recognised and treated as crime. I do not want to weary you with figures, but I may remind you of the well-established fact that during youth and adolescence the proclivity to crimes of acquisitiveness is far greater than at any other period of life; in this country, for instance, a fourth of the persons convicted of larceny are under 16 years of age, and nearly half are under 21; or, to look at the matter in what may be a more suggestive way, we may put it that the proportion of persons convicted of indictable offences in relation to the total population is highest in the age-period 16-21, when it amounts to 321 per 100,000, that between 12 and 16 it amounts to 261 per 100,000, that in the period 21 to 30 it falls to 245, declining rapidly then in each succeeding age-group. These figures, of course, are simply a statistical expression of the fact that throughout the period of development the will in its higher controlling form is imperfectly organised, and as a result of this immaturity the individual is relatively lacking in the power to check and govern his appetites so as to bring his conduct into harmony with the legal and ethical standards of the community. And in this connection we have, of course, to remember that development in man is very slow, relatively slower than in any other animal, in accordance with the general rule that the more complex the organism the longer it takes to reach maturity. The ossification of the skeleton, as you know, is not completed till about the twenty-fifth year, and it is only about that time, too, that the organic functions attain their perfection of rhythm, so that a good third of human life is thus given up to the process of growth. And if this is true of the grosser activities of the body, it is, of course, doubly true of the latest and most complex development of nervous function, the coordinating and controlling will. It is, then, fairly obvious that some degree of inhibitory feebleness, some lack of self-control is natural in adolescence, and hence we must regard the criminal activity, which we find to be so marked at this period of life, as being to a certain extent almost a normal, a physiological manifestation. I need hardly remind you in passing that this view has recently found practical recognition in this country, and with peculiarly fortunate results, in the initiation of the Borstal System, under which the adolescent offender is dealt with by educative and reformatory methods, designed to prevent the fitful and unregulated temper of immaturity from becoming fixed in the criminal habit.

Now, seeing how slowly and gradually the restraining power of the will is built up in youth and adolescence and on what infinitely varied and complex conditions its growth may depend, we can readily understand that the possibilities of the process suffering arrest or perversion must be very considerable; and when we remember, as we all can from instances within our own ex-

perience, to what an extent faulty education can retard or altogether prevent the acquisition of habits of self-control, and how easily such habits, when still recent, may be weakened or lost, as, for instance, in conditions of fatigue or ill-health—when we bear all this in mind we shall have little difficulty in admitting that the development of the more elaborate inhibitions which depend on the force of the social and moral feelings and ideas, must very often be so much checked and modified as to be hardly recognisable. What we have to infer from these considerations is, therefore, that neither the appearance of criminal tendencies in childhood—for that is quite normal—nor the persistence of such tendencies as a criminal impulsiveness in adolescence and adult life—for that may be merely a result of bad environment—neither of these facts can be regarded as a sufficient proof of defective organisation, of innate incapacity for social adaptation. A boy may be self-willed, violent, capricious, he may even be a bit of a liar and a bit of a thief, without going outside the limits of the normal in boy character; and this same boy may, if neglected, grow up into a hooligan—and that is, in fact, the history of the majority of habitual criminals—but for all that he may not have been a criminal child in the sense in which we are using the term here. Before we can bring an individual into that category we must have evidence that his conduct is really morbid, that it is related to a disorder of nervous organisation. It is to the consideration of that evidence that we have now to turn.

Broadly speaking, this evidence is of two sources; it is either given directly by the character of the emotional and impulsive disorder, or it is inferred from other indications of disease or defect. And first as regards the disorder of conduct and feeling. Here, of course, as in all contrasts between the healthy and the morbid, the normal and the abnormal, we are dealing only with differences of degree and not with differences of kind. The morally defective and the ordinary child are both moved by impulses which are essentially the same in nature, and the failure to restrain these impulses is due in both to the absence or weakness of the same controlling centres. The morally defective, the criminal child, does not reveal his morbid character by new impulses but by the disordered and exaggerated play of the normal impulses, finding expression in modes of feeling and conduct which depart more or less widely from those of the average child. In this relation, however, it has, of course, to be remembered that the moral and mental growth of the child, like the development of his lower physical powers, is not uniform nor uniformly progressive; various nervous functions develop with varying degrees of rapidity in different individuals, and this will often result in a temporary appearance of irregularity and excess which must be distinguished from the irregularity and excess that are due to permanent defect. Subject to the reservation which this implies, we may look with suspicion on any marked excess in irritability, in deceit, in cruelty or destructiveness, especially when associated with any precocious sexual tendencies. Very frequently this vicious temper is shown in several directions, so that the future criminal signalises himself by the multifariousness of his wickedness. And this trait, it may be remarked, persists into adult life, and is sometimes a valuable sign of the pathological disposition in a criminal. For instance, one moral defective whom I have known for many years, and who exhibited criminal tendencies in several forms in childhood, when he graduated as a gaol-bird later in life, several sentences for quite a variety of offences—for theft, for vagrancy, for assault, for attempted suicide, for arson, and for a whole series of different offences against morals. Like many delinquents of his class, this man displayed a monkey-like mischievousness in all his criminal acts which was very characteristic of his mental debility. Children showing this vicious precocity are also in most cases intellectually defective, though they may be so to only a very slight degree—sometimes, indeed, their weakness of judgment is shown merely in their lack of critical insight in preparing or excusing their misdeeds. In such cases the

morbid character of the child may be most evident in his relations with his school-fellows which foreshadow his social inadaptability; his defects come out more in play than in lessons, and his educational standard may tell less about him than the nick-name bestowed on him by his comrades.

The intellectual weakness to which I have just referred is so intimately related to the moral defect in the criminal child that it must count as the most important indirect evidence of morbid constitution. I do not, of course, mean to say that there is any inter-dependence between the moral and the intellectual development; the obvious want of correspondence between the degree of deficiency in either sphere would, indeed, suggest quite the opposite view. Probably the truth of the matter is, that it needs intellectual as well as ethical defect to bring the degenerate to prison, so that the cases where moral idiocy co-exists with normal or superior intellectual power—if such cases there be—would be met with not in gaol, but in that wide territory which separates legal from moral delinquency. However that may be, it is certainly the rule to find that the criminal defective has given some evidence of intellectual weakness in childhood—he has failed, for instance, to get beyond a very low standard at school, or he has never been able to learn some particular subject.

With or without obvious intellectual debility, we often find in criminal children a further sign of morbid constitution in the presence of epilepsy, and perhaps even more frequently than the actual neurosis we meet with the typical epileptic character. This, as you know, is shown in an excessive irritability and changeableness of temper, in sudden and extreme alternations of feeling and in violent impulsiveness—all of these conditions bearing the mark of periodicity which belongs to the manifestations of epilepsy. This character is found with special frequency in the children of the alcoholic. In other children, again, the moral debility has a hysterical colouring, and in these cases the intellectual weakness may be very slight; the child does well enough at lessons, but he reveals his morbid temper by various extravagancies of conduct, notably by fantastic lying, and sometimes, too, by vagrant fits, when he may stray away from home for days and perhaps only vaguely remembers what has happened to him. We often get a history of this sort in neurotic swindlers. In yet other cases the nervous disorder is characterised chiefly by a lack of balance, a want of mental harmony; and in many individuals of this type eccentricity of temper is more evident than moral defect, which may be trifling in degree and limited to a few impulses. These degenerates have what Maudsley has so aptly termed the spasmodic diathesis; they are often subject even in early youth to obsessions and impulses generally of an absurd sort, but occasionally leading to criminal acts.

Finally, to complete this review of the several groups of criminal children, we may refer to those cases where the evidence of mental and moral abnormality is not apparent until about puberty; as a rule, we have then to deal with actual insanity, and such cases only interest us here because it so often happens that the disorder of conduct and feeling precedes the disorder of thought by months or even years; the character and manners change perhaps when the boy is 13 or 14 years old, and he shows vicious and criminal tendencies, the real meaning of which only becomes clear when he develops delusions or goes raving mad at 16 or 18. Sometimes, of course, mental disorder of this kind affects children who have already shown signs of abnormality, and in other cases the bad family history raises a strong presumption of the existence of innate deficiency.

In all the groups which we have spoken of, it is usual in a large proportion of cases to find evidences of physical defect or deformity. Long lists of these so-called "stigmata of degeneracy" are to be found in the literature of criminal anthropology, and several authors have attached very great importance to their presence. So far as my personal experience goes, I should say that they have relatively small signifi-

cance, though in some cases their occurrence in marked degree and in large numbers may help to prove that emotional and impulsive disorders are due to defective organisation and not to merely temporary irregularity of development.

And now, if I have not out-wearied your attention, I should like, before bringing this paper to a close, to touch for a moment on one or two practical inferences to be drawn from our discussion of this question. The first and most important of these inferences is so obvious that it is hardly necessary to indicate it: it is that the problem of the criminal child is essentially a particular aspect of the general problem of feeble-mindedness, and that on that account the arguments for the segregation of the weak-minded and for the adoption of methods to prevent the propagation of defective stock—the prescriptions, in fact, of what Dr. Saleeby has aptly termed negative eugenics—apply to the moral as well as to the intellectual imbecile. If anything, indeed, they apply with more force to the morally defective, since these latter not only suffer from the unfitting environment of the normal, but themselves react injuriously upon that environment and become centres of corruption and disorder, the intensity of their vicious impulses giving them an easy ascendancy over the pliant and mutable temper of the ordinary child. The frequently collective character of juvenile crime suggests how powerful this bad influence may be. More than that, by early segregation these individuals are protected from the stimuli which provoke their vicious tendencies, and so a chance is given for developing whatever capacity for moral and social feeling they may have, and most of them have at least a rudiment; even in prisons it is but rarely that one meets with cases of such moral monstrosity, with "born devils," on whose nature nurture can never stick."

And this fact leads me to the second main conclusion which I should like to submit to you, namely, that we must be very cautious and very hesitant in affirming the existence or the degree of moral imbecility; the results of bad nurture are sometimes exceedingly like the results of bad nature, and to distinguish between them is often a difficult, and may be, an impossible task.

## PROPOSED STERILISATION OF CERTAIN DEGENERATES.

By ROBERT R. RENTOUL, M.D.

It will be of interest to those who agree to my proposal—made in 1903—that one way of lessening the ghastly total of degeneracy would be to so surgically operate upon certain degenerates that they could neither beget nor conceive—is gaining ground.

Already two States in America have adopted my proposal.

On January 1st, 1909, there were, in England and Wales, no fewer than 128,787 officially certified insane; and an increase of 2,703 in the year. But there are a great many at large who are not "officially" reported. In 1859 there were only 36,762 certified insane.

The insane rate since then has increased by 250 per cent., while the population has increased by 81 per cent., and evidently—judging by our "do-nothing" policy—we are quite content to go on marrying and breeding more and more degenerates; and to expend yearly millions of pounds sterling upon these—an expenditure which gives us no results.

It may be that new proposals in an *old* country are always the product of an ill-balanced mind, or are to be labelled heretical. But on February 10th, 1907, the legislature of the State of Indiana passed the following Act:—

"An Act entitled an Act to prevent procreation of confirmed criminals, idiots, imbeciles, and rapists—providing that superintendents or boards of managers of institutions where such persons are confined shall have the authority, and are empowered to appoint a committee of experts, consisting of two physicians, to



examine into the mental condition of such inmates.

"Whereas heredity plays an important part in the transmission of crime, idiocy, and imbecility. Therefore, be it enacted by the General Assembly of the State of Indiana, that on and after the passage of this Act, it shall be compulsory for each and every institution in the State entrusted with the care of confirmed criminals, idiots, rapists, and imbeciles, to appoint upon its staff, in addition to the regular institution physician, two skilled surgeons of recognised ability, whose duty it shall be, in conjunction with the chief physician of the institution, to examine the mental and physical condition of such inmates as are recommended by the institutional physician and board of managers.

"If in the judgment of this committee procreation is inadvisable and there is no probability of improvement of the mental condition of the inmate, it shall be lawful for the surgeons to perform such operation for the prevention of procreation as shall be decided safest and most effective. But this operation shall not be performed except in cases that have been pronounced unimprovable."

Again, on August 12th, of this present year, the State Legislature of Connecticut enacted:—

"An Act concerning operations for the Prevention of Procreation.—Be it enacted by the Senate and House of Representatives in General Assembly convened:

"Section 1.—The directors of the State prison and the superintendents of State hospitals for the insane at Middletown and Norwich are hereby authorised and directed to appoint for each of said institutions, respectively, two skilled surgeons, who, in conjunction with the physician or surgeon in charge at each of said institutions, shall examine such persons as are reported to them by the warden, superintendent, or the physician or surgeon in charge, to be persons by whom procreation would be inadvisable.

"Such board shall examine the physical and mental condition of such persons, and their record and family history so far as the same can be ascertained, and if in the judgment of the majority of said board, procreation by any such person would produce children with an inherited tendency to crime, insanity, feeble-mindedness, idiocy, or imbecility, and there is no probability that the condition of any such person so examined will improve to such an extent as to render procreation by such person advisable, or, if the physical or mental condition of any such person will be substantially improved thereby, then the said board shall appoint one of its members to perform the operation of vasectomy or oöphorectomy, as the case may be, upon such person. Such operation shall be performed in a safe and humane manner, and the board making such examination, and the surgeon performing such operation, shall receive from the State such compensation, for services rendered, as the warden of the State prison or the superintendent of either of such hospitals shall deem reasonable.

"Section 2.—Except as authorised by this Act, every person who shall perform, encourage, assist in or otherwise promote the performance of either of the operations described in Section 1 of this Act, for the purpose of destroying the power to procreate the human species: or any person who shall knowingly permit either of such operations to be performed upon such person—unless the same be a medical necessity—shall be fined not more than one thousand dollars, or imprisoned in the State prison not more than five years, or both."

There need be no objection to such an operation as is here suggested. It is very simple, practically painless, makes no difference at all to the bodily functions, and has no ill-effects of any kind. It prevents nothing but the power to procreate. It is the outcome of modern scientific knowledge, and must not be confounded with older and much more drastic methods.

In 1905 the Houses of Representatives and the Senate of the State of Pennsylvania passed a Sterilisation Bill, but the Governor of the State refused to sign it, evidently holding that further time was required. But from what correspondents in the States told me, there is every likelihood of many States following the practical example of Indiana and Connecticut.

In this country the cry is often—"Let me alone"; "Don't worry us"; "Wrongs will right themselves"; or, "I needn't worry; things will last my time." Such a mixed policy of hypocrisy and slavish desire to tread the beaten track will not work for good.

We howl about the increase of paupers. Yet we allow the pauper to leave the workhouse to get married. We howl about the increase of criminals. Yet we allow criminals to marry and to beget more criminals. And we howl about the increase of insanity and the feeble-minded. Yet we allow these to marry and to beget offspring fully qualified to perpetuate the weak-mindedness of their progenitors. Surely a noble and worthy national policy!

Some time ago I called attention to the fact that five feeble-minded women had given birth to fifteen feeble-minded infants(a). Later still, Dr. Potts stated that in one workhouse 16 feeble-minded women had given birth to 116 idiot children. Dr. Branthwaite, in his annual report (for 1905) on Inebriate Homes, states that 92 habitual inebriate women had had 850 babies.

Is it not time we took some definite action in this great national question of needlessly breeding more and more degenerates? Our present inaction is based only upon hypocrisy and cant, and has no reference to the unnecessary sufferings of so many degenerates.

## OPERATING THEATRES

### KING'S COLLEGE HOSPITAL.

CASE OF EXTRAVASATION OF FÆCES.—MR. PEYTON BEALE operated on a man, æt. about 40, who had been admitted the same morning, with the following history: He had been under the care of Dr. Branwell, at Penzance, for some months. It appeared that he had been complaining of some very indefinite abdominal pain, and although repeated careful examinations had been made, there was absolutely no evidence to show to what this pain was due. It could be realised how unimportant it was, since the doctor and the patient came to the conclusion that the pain was of a "nervous" origin. There had been some constipation, but this apparently was not bad enough to give rise to any real trouble. The history obtainable on admission from the patient was as follows: For some few days prior to admission he said he had noticed that his urine was "dirty": he said it was greyish in colour, and contained small particles; he also said that the flow of urine was not continuous. Two days before admission the doctor found that the urine contained liquid fæcal matter: he also observed that the patient had a small swelling beneath the skin of the abdominal wall just above the symphysis pubis. It was quite clear that at this time the patient was suffering no pain or inconvenience, and was getting about his work as usual. On the following day (one day before admission) the abdominal swelling was larger, the skin over it being slightly flushed; there was no temperature, and the patient appeared in very good health. He was sent up from Penzance by the night train, and walked into the hospital the next morning. On admission he was a perfectly healthy, robust-looking man, very well nourished, complaining of nothing but some discomfort on passing urine. When he micturated, liquid fæces and urine, accompanied by a large amount of sulphuretted hydrogen, passed from the urethra. Just above the pubes there was a tense hemispherical swelling about five inches in diameter, painful on palpation; the skin over it was red, and fluctuation was felt. The patient was taken into the theatre and anaesthetised, and after the usual preparation, a vertical incision was made into the swelling, from which about half-a-pint of liquid fæces only escaped. A cavity about the size of an ordinary orange was found between the superficial fascia and the aponeurosis of the external oblique. The walls of the cavity were very oedematous and sloughy in parts. Upon irrigating the cavity thoroughly, an aperture about three-sixteenths of an inch in diameter was found passing

(a) See "Race Culture, or Race Suicide?" Second Edition.

downwards and backwards. A probe inserted into it passed into the bladder, and through the aperture liquid faeces and blood oozed up. Under the circumstances, it was clear that the only course which could be reasonably pursued at this time was that of draining the bladder. The patient was, therefore, at once placed in the lithotomy position, and Cock's operation performed. This consisted of a median perineal section, the left forefinger being placed in the rectum, the knife being inserted in the middle line of the perineum half-an-inch in front of the anus, with the cutting edge forwards; the knife was plunged in opening the posterior urethra, the right forefinger was then inserted, tearing open the urethra until the cavity of the bladder was reached. A fair amount of urine and liquid faeces escaped, and there was some bleeding from the congested prostatic plexus of veins. A rubber drainage tube one inch in diameter was introduced into the bladder, and gauze was firmly packed into the small space between it and the edges of the wound.

After this the patient was extraordinarily well for the next three days. As he was then passing all faeces through the bladder drain, it was decided to perform an abdominal section so as to ascertain the cause of the trouble. The abdomen was opened along the outer edge of the right rectus, and on exploring the interior the upper part of the sigmoid flexure was found adherent in the middle line to the abdominal wall in front and to the bladder below. On passing a probe through the original abdominal wound, it became clear that there was an orifice about half-an-inch in diameter in the sigmoid, communicating upwards with the original abdominal wound, and downwards with the bladder. After a careful dissection through adhesions, the sigmoid was brought outside the abdomen through the original abdominal incision. Immediately below the perforation there was a hard stricture; this and the perforation were at once excised; the bowel was perfectly healthy half-an-inch beyond on either side, the length of sigmoid excised being only about an inch and a-half. The edges of the sigmoid were then brought together by an end-to-end anastomosis, and the junction replaced within the abdomen, which was thoroughly irrigated. The aperture in the bladder could be reached, but could not be sutured. As the bladder was thoroughly draining through the perineal wound, a gauze packing was introduced between the bladder and the newly joined sigmoid. No report, Mr. Beale said, has as yet been received as to the nature of the stricture in the sigmoid, but from its appearance and from the general condition and history of the patient, it probably resulted from a localised ulceration possibly due to a dilated sacculus of the sigmoid, which had become adherent to the anterior abdominal wall, on the one hand, and the bladder on the other.

We hope to give Mr. Beale's further remarks on this interesting case in a later number.

## TRANSACTIONS OF SOCIETIES.

### ROYAL ACADEMY OF MEDICINE IN IRELAND.

#### SECTION OF OBSTETRICS.

MEETING HELD FRIDAY, DECEMBER 3RD, 1909.

The President, HENRY JELLETT, M.D., F.R.C.P.I., in the Chair.

#### EXHIBITS.

DR. GIBSON exhibited a specimen of myomatous uterus with necrosis of one large tumour and carcinoma of the endometrium. The patient from whom the uterus had been removed a few weeks previously, was over sixty years of age, and twelve years past the menopause. She knew that she had the tumour for many years, and had been given to understand that it would never do her any harm after the change of life. She had never been pregnant, and enjoyed good health

up to four weeks before he saw her, when she suffered from a severe attack of uterine hæmorrhage. She had not had any discharge from the menopause to that time. She had no pain, and except that she thought she had been getting thinner for the past five or six months, she noticed no change in her general health. Examination showed a large myomatous uterus with the cervix unaltered. There was no hæmorrhage, but when the sound was passed the uterine cavity bled freely. He decided to perform panhysterectomy. When the abdomen was opened, as the uterus felt peculiarly soft, it was grasped with a museaux forceps in what seemed to be the most solid part. The forceps, however, tore a hole in the surface of the uterus, and a large quantity of yellowish creamy fluid escaped. Fearing that the uterus would tear, it had been carefully packed off, so that none of this fluid got into the peritoneal sac. It proved, however, not to be pus. The removal of the uterus was easy, but scattered everywhere over the pelvis he found nodules which were deposits of carcinoma. These and the condition of the uterus showed the great extent to which the disease had extended without any symptoms. The patient did very well. He also exhibited a specimen of carcinoma of the cervix removed by Wertheim's operation. The patient was 25 years of age; married 4 years. Four months before he saw her she had a perfectly normal labour, and suffered from nothing either before or after her babe was born. She had no bleeding until six weeks before he saw her, when she described a creamy discharge, with streaks of blood. The disease in the cervix was advanced, and the specimen showed the very large amount of tissue which could be removed with the uterus by this operation. The patient made a good recovery, and was the fourth under the age of 30 for whom he had performed Wertheim's operation this year.

Sir WILLIAM SMYLY said it was very difficult to prophesy in myoma. He recalled a case in which the patient had had a uterine tumour for 30 years. Six months after seeing her it was fixed in the pelvis with malignant disease.

Professor ALFRED SMITH cited a case in which, after some hesitation as to giving advice, he dilated the uterus, and found what he thought to be a tiny ulcer. He scraped away sufficient for a microscopic examination. The pathologist pronounced it to be malignant disease, rapidly growing, in which the prognosis would be very bad. It was, however, a typically ideal case for good results, and he removed the uterus, but within nine months the patient was dead. The case brought home to him the fact that the useful information given by the pathologist could be extended to state whether the tumour was actively growing or not.

The PRESIDENT (Dr. Jellett) said the opinion given 20 years ago as to a tumour not doing harm might have been perfectly correct then, in view of the risk of operation; but now it is possible and right to advise the performance of operation on account of the great improvement in their technique.

Dr. GIBSON replied.

#### OVARIAN PREGNANCY.

Dr. E. HASTINGS TWEEDY exhibited a specimen of ovarian pregnancy, probably the first exhibited in Ireland. A. H., æt. 25; married four years; three children, last five and a-half months ago (June, 1909); one abortion. Menstruated September 18th, 1909, first and only time since delivery. November 5th.—Acute pain in right lower abdomen, from which she almost fainted. Examined at 4 p.m., November 5th, in extern department. Very tender mass the size of a hen's egg to the right of retroverted uterus. Left appendages normal. Tumour on right could not be definitely localised to ovary or tube.

*Diagnosis.*—Extra-uterine pregnancy.

November 13th, 1909.—In the interval had several attacks of pain. Morning of November 13th pain more severe, and associated with slight uterine hæmorrhage. On admission, tumour increased to twice its former size, otherwise physical examination the same.

*Operation.*—November 16th, 1909.—Ether. Right

oophorectomy. Both tubes and left ovary microscopically perfectly normal. Blood clot about 3 inches in diameter completely obscured right ovary. This was clamped and removed, ovarian tissue being cut through in removal.

The case had fulfilled all the conditions laid down for ovarian pregnancy. He thought the specimen was worth public acknowledgment by the Section.

Dr. TWEEDY also exhibited a specimen of specific elephantiasis of the vulva. M. B., æt. 30; married 14 years; last pregnancy 10 years ago; three dead-born children; one child lived two hours. Wasserman's reaction for syphilis positive. (Reported from Sir A. Wright's Laboratory.) Has always had a yellowish purulent vaginal discharge. For ten years has had a tumour of the vulva, which has grown slowly but steadily.

*Physical Examination.*—Hypertrophy of labia minora, measuring about  $2\frac{1}{2}$  by  $3\frac{1}{2}$  inches. Considerable œdema. Induration and œdema involved labia majora, and extended down to ischio-rectal fossa on either side.

*Operation.*—Excision. Interrupted catgut sutures.

Dr. ROWLETTE said the specimen of ovarian pregnancy showed to the naked eye the *corpus luteum*. A section taken through the *corpus luteum* and the edges of the blood-clot showed a proliferation of the cells of the *corpus luteum* and the mass of blood-clot in which three or four villi were seen. The other specimen consisted of lax connective tissue covered with a thin skin. The laxity was probably due to an increase of the lymphatic spaces.

The SECRETARY quoted a case reported in the November number of the *American Journal of Obstetrics*. On the day the woman expected to be delivered she complained of pains. These went off, and 12 days later she went into hospital. A tumour was found strongly resembling an ovarian cyst. On opening into it a foetus was found. This was delivered and resuscitated. The child was up to term, and free from deformities, and the patient made a complete recovery.

The PRESIDENT said the case was one in which they must suppose a person capable of making a mistake until he could conclusively prove that he had not made one. It was not a question of distrusting the powers of diagnosis of Dr. Tweedy and Dr. Rowlette, but rather a question as to whether the whole profession would accept the power of the Section to express an opinion. He, therefore, urged Dr. Tweedy to refer the specimen to a committee. His own opinion was that it was an ovarian pregnancy.

Dr. TWEEDY, in reply, said he was quite agreeable that the diagnosis should be confirmed.

Sir WILLIAM SMYLY proposed that Dr. Tweedy's specimen be sent to the Reference Committee for report.

Professor ALFRED SMITH seconded, and the motion was passed unanimously.

#### PAINLESS LABOUR.

Dr. SPENCER SHEILL reflected over the usual suffering of women in labour, and quoted three exceptions to the rule he had observed in his own practice—in one of them the process was entirely painless. He argued, "If Nature sometimes allows childbirth without pain, why should the obstetrician not endeavour to follow her good example?" He spoke of the gain to surgery of chloroform and ether, and their disadvantages in labour, at any rate in the long first stage. The expectant mother of to-day is, according to him, less able or willing than her mother or grandmother to bear bravely the suffering entailed, due largely to the evils of civilisation and to the present-day pursuits of women. For this reason he had used in his practice during the past year the scopolamin-morphin treatment on some nineteen cases, and gave his results, which he believed are the first of the kind published in Ireland. The many contradictory reports from users of it since Krönig's first paper on the subject are due, he believed, largely to great differences in the quality of the drugs used. He quoted the opinion of some who still believe in such a thing as "death from labour shock" *per se*,

and stated, if it be true, "painless labour" might be a factor in lessening maternal mortality. It is generally believed that scopolamin and hyoscin are exactly similar, and the author quotes various authorities on chemistry who support this view—among them Martindale, Binz, and even the British pharmacopœia. True, pure hyoscin and scopolamin are chemically similar, but exist in three stereoisomeric forms—viz., dextro, lævo and racemic modifications. The important point is that the "lævo" acts much the strongest on peripheral nerve endings. He believed that some writers use the word scopolamin to denote this form, and hyoscin to denote the other weaker forms. The processes of manufacture can change the stronger form into the weaker. Messrs. Burroughes Wellcome have assured the author that their "Tabloid" hyoscin hydrobromide consists only of the pure "lævo" form. Scopolamin, he stated, is also a respiratory and circulatory stimulant, and so counteracts some undesirable effects of morphia. The doses are from  $1/200$  to  $1/100$  grain of scopolamin and  $\frac{1}{4}$  to  $\frac{1}{2}$  grain of morphin. The scopolamin is sometimes repeated, the morphin seldom or never. They are used in the first stage when pains are getting strong, quietness is then insisted upon, and the room is darkened. The patient may sleep or get drowsy, but labour proceeds unaffected. Loss of memory for the time being is the principal after-effect he had noted. He had also seen flushing of the face and quickened pulse. He had not observed asphyxia neonatorum, post-partum hæmorrhage, etc., recorded by others. A case of chorea gravidarum was very favourably affected. The author believed the drug would be useful in eclampsia in counteracting the depressant action of morphia alone, and preventing the morphin from checking uterine contractions. He warned them against the use of hard water in making the solution, as alkalies will precipitate the alkaloids, and so reduce the dose given. He concluded by stating that scopolamin-morphin has many advantages, but doubted if these were not outweighed (except in a limited number of cases) by certain disadvantages; and advised more extended trial in Ireland by the large maternities.

Dr. TWEEDY said he had observed that if the vagina was tightly plugged labour progressed almost painlessly, no doubt owing to pressure on the cervical ganglia.

Dr. FREELAND said they first commenced to give scopolamin at the Rotunda in September, 1908. They now gave  $1/120$  scopolamin, with  $\frac{1}{4}$  morphia, and repeated in  $1/180$  grain doses without the morphia. They had given it in about 40 cases. One baby was born slightly asphyxiated, but it breathed after a hot bath. The others were born perfectly normal. None of the women showed any abnormalities after labour, except one who got out of bed when not watched. He thought the use of forceps had been less frequent, and he did not think it prolonged labour. The majority of the patients went asleep for an hour or two after injection, and wakened up with more or less demonstration during a pain and slept between pains. They had three absolutely painless deliveries.

Dr. SOLOMONS said that amongst other cases which he had treated by the scopolamin method was one which had occurred a few days previously. In that case he gave scopolamin hydrobromide  $1/120$  gr., and morphia sulphate  $\frac{1}{4}$  gr., when the os was three-quarters dilated. The patient had been very rowdy, but after the injection she slept, and was surprised when informed of the birth of the baby.

The PRESIDENT said he had given the drug in one case, and had obtained a painless labour. There was some hæmorrhage after delivery, and he found it was from a laceration about the vagina. This bore out Dr. Sheill's remark that women under scopolamin morphine anæsthesia, not appreciating the pain, were apt to strain very hard.

Dr. SHEILL, in reply, said he thought the plugging of the vagina only substituted one pain for another. The cases mentioned showed the disadvantages of the method, which required constant medical supervision.

## LIVERPOOL MEDICAL INSTITUTION.

MEETING HELD DECEMBER 16TH, 1909.

The President, Mr. T. H. BICKERTON, F.R.C.S., in the Chair.

DR. J. M. HUNT showed a case of Vincent's angina, and referred to the differential diagnosis between it and diphtheria and syphilis. There were two other cases in the same family.

Dr. E. E. GLYNN demonstrated the characteristic fusiform bacilli and "spirilla" from the case, both in smears and with the dark-ground illumination.

Dr. THURSTON HOLLAND demonstrated solid carbon dioxide, the method of preparing it in the form of sticks from the cylinder of gas, and explained its uses for the removal of *nævi*, etc.

CASE OF ADAM-STOKES' DISEASE IN A CHILD, *Æt.* 5½.

Dr. HUBERT ARMSTRONG read notes of a case of heart-block occurring in a boy, *æt.* 5½. The symptoms began in July of this year, about a week after an alleged fall upon the head. At first there was severe headache, occasional delirium, temperature 104° and 105°, with pulse 48 and lower. There were no other symptoms, and the nature of this febrile attack, which lasted 5 days, is not clear.

Patient recovered, but a fortnight later had a series of epileptiform attacks, accompanied by profound syncope, and lasting over 5 days, on the second of which he was admitted to hospital. After admission he had eight convulsions in three days, and in the intervals there was great cerebral irritation, so much so that the case was regarded as one of meningitis until lumbar puncture revealed a normal c.s. fluid. This irritability disappeared 24 hours after the last "fit." The pulse rate during the first ten days varied erratically between 28 and 84. It then became constant between 50 and 60 for five days, when it rose to above 100 for four days. It then fell to between 40 and 50, and has maintained the same rate to the present. Simultaneous venous and radial pulse tracings taken during this last period show typical dissociation of auricular and ventricular rhythms, the auricles beating about 70 when the ventricular rate was 45. The phenomenon was also demonstrated on the fluorescent screen.

There have been no further epileptic fits since the third day after admission, and the child, except for a little cyanosis, and that he is incapable of much exertion, at present appears quite comfortable. There is a slight mitral regurgitant murmur, but the cause of the heart block is undetermined.

Dr. JOHN HAY read a paper on

## HEART BLOCK, COMPLETE AND PARTIAL,

in which he referred to six cases of Adams-Stokes' disease which had been under his supervision during the last two years. Five of these cases were of the arterio-sclerotic type, the sixth was apparently caused by a severe gonococcal infection in a young woman. The patients exhibited all the grades of severity, ranging from slight attacks of vertigo and transient blurring of consciousness, with bradycardia, to grave syncope and epileptic seizures. The insidious onset of the malady was referred to, diminution in the area of cardiac response being in some instances the first disturbing feature. Records were shown demonstrating the actual transition from partial to complete block, and the return from complete to a two to one rhythm without the appearance of any subjective symptoms. The pathological findings in the disease were referred to, and treatment was considered. One of the cases had been greatly benefited by potassium iodide, and the gonococcal case had improved after the exhibition of a gonococcal vaccine.

The case and paper were discussed by the President, Drs. Macafee, T. R. Glynn, Sir James Barr, Drs. Abram, T. R. Bradshaw and Buchanan, and Dr. Hay replied.

## CORRESPONDENCE.

## FROM OUR SPECIAL CORRESPONDENTS ABROAD.

## GERMANY.

Berlin, Dec. 26th, 1909.

AT the Medical Society a discussion took place on the subject of

## TREATMENT BY TUBERCULIN,

introduced by Hrn. Citron.

Hr. Jochmann said he agreed with the introducer of the subject as regarded intervals, gradually creeping up from small doses, and avoidance of fever reaction; but he did not agree that there was no biological criterion for estimating the effects of treatment. The cutaneous reaction was such a criterion. In his patients he brought about a cutaneous reaction both with "old" tuberculin and tuberculin emulsion, before commencing actual treatment. Tuberculosis, as a rule, reacted to both preparations. If now a patient was immunised with "old" tuberculin when the immunisation had reached a certain height, the reaction to it ceased, but not to the bacillus preparation; such a dose should only be reached with "old" tuberculin. To this treatment was added a continuation with the emulsion as far as the disappearance of the cutaneous reaction with this preparation also. For the latter, stronger emulsions of bacilli were required than were in the market; the speaker took a dilution of the dry substance of 1 in 50. With disappearance of the cutaneous reaction for both preparations he considered that a considerable degree of immunity had been reached.

Out of 12 cases treated by himself with the "sensibilised" tuberculin, 9 of them became feverish with a dose of 1/1,000. As regarded the improvement mentioned, it took place also with the ordinary tuberculin emulsion, so that there was no need of a new preparation.

More importance was to be attributed to the occurrence of antibodies. In treatment with "new" tuberculin at a certain height of immunisation, antibodies were regularly seen to occur which remained longer in the blood than with "old" tuberculin. From Citron's communication, it would appear that with "sensibilised" tuberculin these antibodies only rarely made their appearance, which was evidence in favour of the old emulsion. According to all recent experiences—for example, in case of meningococci also—the amount of complement-forming material went parallel with that of the protective substance.

Hr. Fr. Meyer remarked that serum treatment was often prohibited on account of over-sensitiveness on the part of the patient. He had had a serum prepared from a combination of sensibilised bacillus emulsion and tuberculous serum from tuberculous animals. When applied to the human subject the smallest doses were to be given at first, gradually increasing them. No local reaction had ever been observed with this new serum. Cases suitable for it were patients without fever, and initial and local tubercloses. It should not be used with cases that had been treated with "old" tuberculin, as a condition of over-sensitiveness was set up in patients treated by it.

Hr. Eckert said that in Heubner's Klinik only scrofulous cases were now treated by tuberculin. The general condition of the children improved considerably under the treatment, but how much of this improvement was due to stay in hospital it was difficult to say.

Hr. Max Wolff said that the dangers of tuberculin treatment prevented many medical men from making use of it. But, with sufficient experience with tuberculin methods, these dangers could be avoided. Very small doses should be begun with. As regarded the question of the preparation, judging from recent experiences it was not what preparation, but how it was used. He had used the "old" tuberculin principally. The bacterium emulsion, from his own experiences, did not reduce the fever. The most suitable

cases for tuberculin treatment were catarrhal attacks, but even with solid infiltrations he had repeatedly seen surprising results. Failures were not wanting, however. Tuberculin treatment could also be carried out with out-patients.

Hr. Ed. Meyer had seen good results with Fr. Meyer's serum in tuberculosis of the larynx—better than with the "old" tuberculin.

Hr. S. Cohen said that at the Finkelstein Klinik three children treated with Meyer's serum had improved. That the curative action of tuberculin depended on its immunising properties was not proved, as in a large number of children their sensitiveness to tuberculin increased under treatment, although they improved under it.

Hr. Max Schultz had seen improvement under the treatment in cases of active disease. He had also used the sensibilised serum, and had obtained results similar to those obtained with "old" tuberculin; perhaps the fever was less.

Hr. F. Kraus said we could not draw conclusions as to efficacy of treatment from the formation of antibodies. We could not depend on individual symptoms. We must take the case as a whole. In any case, tuberculin treatment must be taken up again, and generally by the practitioner—not in hospitals alone.

Hr. Citron, in reply, said that the good results could not be doubted, and that the "Neutuberculin" was to be preferred. As required by Jochmann, he had made control experiments, and found that the "sensibilised" emulsion acted more mildly in regard to local infection, and more rarely set up fever. The disappearance of the Pirquet reaction was not a biological test.

## AUSTRIA.

Vienna, Dec. 26th, 1909.

### EPIDEMIC POLIOMYELITIS.

At the Gesellschaft der Medizin, Zappert gave a historical report of an epidemic in Vienna and Lower Austria between July, 1908, and February, 1909. The cases recorded are 290, but 266 may be taken as genuine. Of these 266, 129 came from Vienna, and 137 from the lower portion of Austria. The greatest number attacked were between the first and third year of life. Poverty and density of population could not be said to play any particular part in the epidemic. According to recognised semeiology, the 266 cases comprised 241 with spinal symptoms, viz., paralysis of the limbs, the greater number being on the left side, as well as paralysis of the muscles, back, neck, and abdomen, with transitory conditions of the respiratory muscles. The second form, or Landry's paralysis, which consisted of ascending or descending paralysis, with a fatal ending on the respiratory centres, were 14. These mostly took place in the older children, and ran their course in a few days. The third form comprised pontine and bulbar paralysis, attacking 25 of the cases, involving ocular, facial, and constrictor muscles. One of these cases included a cerebral condition. The fourth class included the encephaloid form, affecting the hemisphere of the brain and manifesting itself by spastic unilateral paralysis. In one of the post-mortems of this case changes were observed in the cortex as well as the ganglia of the cord. The ataxic form of Wickmann may be described as an abortive form of ataxia, while his sixth, or polyneuritic form, has no definite anatomical symptom beyond pain or tenderness on pressure of any of the nerves, associated with hyperæsthesia. The seventh and eighth forms of the same author may be viewed as an abortive form of meningitis. Many of these meningeal cases recover very quickly, and may be considered more of an influenza character, with an acute form of visceral catarrh. Other cases, however, went as rapidly down and died before anything could be done. In all the forms mentioned above there was a prodromal state in which fever, malaise, sleeplessness, or somnolence, with angina or other gastric disturbances were present. Frequently the meningitis was the most prominent symptom at first, followed by the paralysis, which in a few days would reach the

maximum, then subside and gradually recede. In a few of the cases great pain in the extremities, neck and head appeared as sequelæ. The fever was never specially high in many of the cases, and seldom lasted over a week, when the paralysis would appear.

Out of the 266 cases, 29, or 10.8 per cent., died, recovery in 37, or 13.8 per cent., was announced, while the remaining cases had a partial recovery. The deaths in Landry's paralysis usually terminated in severe meningeal symptoms, diarrhœa, or pneumonia.

The attacks in Vienna were somewhat irregularly distributed over the city, but the west or northern portions were severely attacked, while the south and east were very little affected. Grouping in particular houses could sometimes be declared, but it could never be definitely established that a particular centre was the cause of the infection. The epidemic, however, appears to have confined itself to limited radii, but the attacks of sisters and neighbours cannot be conclusively proved to establish the disease as infectious, although we must admit it is endemic in Vienna, and suddenly burst forth as an epidemic, as we have seen, at the early part of the year, with its greatest incidence in the early summer months.

## HUNGARY.

Budapest, Dec. 26th, 1909.

### SPONTANEOUS CURE OF AN ANEURYSM.

At the Biharmegye Medical Society, Dr. Révész exhibited a preparation of an aneurysm of the arch of the aorta which had undergone natural cure. B. F., æt. 41, was admitted into the hospital, under Mr. Révész's care, on November 24th, suffering from fracture of several ribs on the left side, with traumatic pleurisy and hæmothorax. On the 27th he died. At the post-mortem examination a tumour about the size of a walnut was found attached to the right side of the ascending portion of the arch of the aorta. When cut into, this tumour was discovered to be an aneurysmal sac filled with laminated fibrine, and having a small cavity communicating with the arch. The left innominate vein was entirely obliterated, and, in the form of a fibrous cord, crossed the lower part of the tumour. The arteries springing from the transverse portion of the arch were normal. No history could be obtained that this man had at any time suffered any inconvenience from the presence of the aneurysm.

At the Sixteenth International Medical Congress, Dr. Grossmann read a paper on

### NASAL ASTHMA.

He said that experimental researches undertaken in the hope of explaining the phenomena of nasal asthma proved that electrical or mechanical irritation of the nasal mucous membrane led to a notable disturbance of the cardiac function, followed by a considerable engorgement of blood in the pulmonary circulation, and by an increase in the external dimensions of the lung. In curarised animals this increased volume of the lung caused a rise of pressure in the inter-thoracic space and a depression of the diaphragm. This effect of nasal irritation was completely absent if either the second branch of the trigeminal nerve or the two vagus nerves were previously divided. There was, therefore, reflex action in a curved path the centripetal portion of which was formed by the vagus nerve. This enlargement of the lung was not caused exclusively by the accumulation of blood, but also by the fact that the pulmonary capacity—i.e., the available pulmonary area—increased in direct proportion to the engorgement with blood. The lung became larger, not only as regards its external dimensions, but also as regards its intra-pulmonary capacity. In accordance herewith the intra-pulmonary pressure, unlike the pressure in the intra-thoracic space, fell when the pulmonary circulation was engorged with blood. This enlargement of the lung was accompanied by rigidity, which seriously interfered with respiration.

### TYPHOID OUTBREAK IN NAGYVÁRAD.

Nagyvárad, one of the most flourishing provincia!

towns of Hungary, became the very nest of a typhoid epidemic lately. The severity of the danger can be estimated from the relatively too high percentage of cases notified. Nominally, since August 1st this year, more than 300 cases were attended by medical men in the town, and about 200 were kept in hospitals. The mortality rate was about 1 in 1,000, taking 58,000 as the number of inhabitants. The cases are mostly of the severer type, perforation of the bowels being very frequent. The town magistrates have strictly investigated the cause of the extraordinary spread of the disease, and they succeeded in ascertaining the fact that the source of the infection came from a neighbouring village, which supplied contaminated milk to a certain part of the town's population, where the disease was, in fact, most notable. Although the members of the Board of Health are taking every precaution and enforcing preventive arrangements for controlling the spread of the disease, no decrease in the number of fresh infections is observed yet.

A remarkable feature of this epidemic is that the sanitary inspectors of the town have resolved to establish a so-called "controlling station for late typhoid patients." This station will examine from time to time persons who have suffered from typhoid for typhoid bacilli, in accordance with the new experiences of some German authors, who state that after a typhoid attack a person, called "bacilli carrier," may carry in himself, and chiefly in his gall-bladder and bowels, typhoid bacilli for twenty years. Such persons, they say, evacuate typhoid bacilli, and thus they are capable of infecting others, if they are not taught how to defend their neighbours from infection. Here, at this station, they will be instructed how to disinfect their stools, which they have to do as long as the blood examination will reveal the presence of typhoid bacilli.

### FROM OUR SPECIAL CORRESPONDENTS AT HOME.

#### GLASGOW.

#### INTERNATIONAL INTERCHANGE OF STUDENTS.

PRINCIPAL SIR DONALD MACALISTER presided at a meeting held in the Students' Union on the 13th inst., in the interests of the International Interchange of Students (United Kingdom Section), when Mr. Henry W. Crees, the hon. secretary of the movement, addressed the meeting. Principal MacAlister explained that the idea underlying the scheme was that no single University was quite sufficient in itself, in so far as giving its students the full advantage of the knowledge of other places was concerned, and that it was desirable, in the interests of the broader education of students, that they should have an opportunity of making each other's acquaintance. By personal contact with other parts of the Empire and other countries a great deal of additional knowledge could be obtained, and if some arrangement could be made for the University of Glasgow by which chosen students were able to be sent as missionaries to other parts of the Empire, and return with their student's mind full of what they have seen, and impart the information they had obtained to their fellow undergraduates before the end of the academic course, it was conceived by those who had put forward the scheme that great advantage would be obtained.

Mr. Crees, in explaining the scheme, said that the first essential was that the students had to return to their own University for a time, in order that their widened outlook of ideas might be shared, as far as possible, by their contemporaries in their college life. It was hoped that fourteen, or more, scholarships would be available for use in certain Universities of the United Kingdom annually, and ten scholarships in the United States, and four in Canada. The qualifications for these scholarships would be along the lines of the Rhodes scholarships, and it was intended that the holders of these scholarships would view, as far as possible, the various activities of the countries

visited, both in educational, social, administrative, and industrial matters, while this should not interfere with the academic course of the student at his own University.

## LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

### THE ETHICS OF ANTI-VACCINATION.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—The enclosed card may remind you that for many years I was a leading specialist practising in London among the wealthier classes, and that I now occupy a position of complete detachment from professional life. Perhaps you may excuse me, under these circumstances, for preferring to veil my personality under a *nom de plume*. I write to confirm the statement made in your excellent editorial note under the above heading to-day, December 22nd, to the effect that every form of quackery has derived an enormous stimulus during late years from the anti-scientific propaganda which involves disparagement of the art of medicine and of its votaries. A large section of fashionable and wealthy people are neither intellectual nor intelligent, and have derived no advantage from so-called education. The home influence predominates, and this is mostly on the side of frivolity and scorn of all serious knowledge. In after life reading is confined to trashy novels and society papers such as those to which honourable gentlemen of the kind you have criticised are the chief contributors. Towards middle age the ailments of these people begin. The wives, with few and neglected, if any, children, finding fatigue and dissatisfaction beginning to make their mark on their faces, seek the help of the beauty doctor to restore their complexion, remove their wrinkles, and save their falling hair. The beauty doctor, who spends thousands a year in advertisements in society papers, is in many cases merely a blackmailer, and plunders with impunity, well knowing that no victim will dare proceed against him and expose her folly in a law court. These fashionable women would resent being told that their face is merely the index of their bodily state, due to their mode of life, and that their only salvation in health would be in following the advice of a wise physician, and they look upon doctors as heartless fee-hunters. This feeling sends them and their husbands straight into the hands of the quacks when organic failure in one or other direction begins to trouble them, or when, becoming worn out and weary in the unchanging pursuit of pleasure, neurotic symptoms begin to develop. This class of patient, as a rule, does not go in for Christian Science; this catches rather the "religious" subject. The smart people go to even a lower class of thaumaturgists—those whose signs decorate the fronts of such an amazing number of buildings in certain fashionable quarters. It is all a question of advertising. Two of the men who are doing the biggest trade at the present moment followed for some years the profession of acrobats. They now cure every functional and organic disease by "electric" baths in which the electricity is negligible; by manipulating the joints of the toes by methods of which they alone possess the secret, and by other procedures having an equally scientific justification. They are spending many thousands a year in advertisements, a measure of their gains, and their puffs are not only to be found in society journals, whose editors, perhaps, know no better, but in the pages of leading papers, whose editors and proprietors are fully aware of the nature of the traffic from which they are indirectly deriving income.

I am, Sir, yours truly,

SENEX.

Near Reigate, Surrey, December 22nd, 1909.



# THE STANDARDISATION OF DISINFECTANTS. *To the Editor of THE MEDICAL PRESS AND CIRCULAR.*

SIR,—Notwithstanding the large amount of chemical and bacteriological work the *Lancet* Commissioners have done, their report does not mark any fundamental advancement in respect of what was previously known concerning this subject.

They have apparently recognised the impossibility of determining the disinfectant value of perchloride of mercury, chloride of lime, and formalin by the bacteriological test which they describe, and yet they have examined "Sanitas Fluid" by it, and classified it as a coal tar disinfectant, although that liquid contains no coal tar, and is quite as dissimilar in character from coal tar preparations as are the three other articles above named.

In regard to coal tar disinfectants generally, serious objection is to be taken against the chemical part of the investigation, inasmuch as the process employed to determine the percentage of active principles fails to give satisfactory results. By way of proof, the *Lancet* process has been employed in our laboratories in respect of a mixture known to contain 88 per cent. phenoloids, but it only showed the percentage of 60 per cent., whereas in respect of a disinfectant liquid known to contain 52 per cent., Mr. Wynter Blyth's acetone process showed it to contain 54 per cent., a much more satisfactory result, while the *Lancet* process gave only 34 per cent.

As for the bacteriological test which has been made, it simply gives the relative values of the coal tar disinfectants which were subjected to examination in respect of *B. coli*, under the special circumstances observed; just as the standardised *B. typhosus* (Rideal-Walker) test gives relative values in respect of *B. typhosus* under the special conditions observed in that test. In neither case do the results indicate the real disinfectant values of the preparations, nor reproduce the conditions under which disinfection has to be carried out in practice by the medical profession and the public at large. This seems to be recognised by the Commissioners themselves, for they state that "the conditions of the test are (so) far removed from those of natural disinfection."

According to the results obtained by the Commissioners, "Sanitas-Bactox" ranks, amongst the homogeneous liquids which were tested, equally with one other preparation, as the highest in germicidal power, on the one hand, and takes top place when the cost is compared on a basis of efficiency. When, however, it is examined by the Rideal-Walker test it gives a co-efficiency of 20 at least, whereas the said other disinfectant only reveals a co-efficiency of about 15. Again, "Sanitas-Okol" takes first place amongst coal tar disinfectants of the emulsion order, both in respect to co-efficiency and comparative cost.

The *Lancet* Commissioners have altogether disregarded the valuable inhibitive and antiseptic properties of the various other disinfectants, and no attention has been paid to their behaviour as oxidising agents or to their chemical activities. They have also disregarded altogether the matter of environment. Every student who has paid the most cursory attention to the subject knows perfectly well that disease is not produced by the mere mechanical presence of micro-organisms, but by their production through chemical reactions of definite poisonous substances, and it is these poisonous substances that constitute the true infectants of disease, and not the microbes themselves. Practical disinfection, therefore, aims at preventing the formation of such infective material, on the one hand, and of destroying it, if and when produced, on the other hand, and is not confined to the mere destruction of universally distributed micro-organisms which, in their proper sphere and under proper control, constitute one of the most beneficent orders of creation.

Germicidal value, therefore, is no measure of disinfectant value; removal by washing (cleanliness) is really much more efficacious, up to a point, than destruction of microbic life by the application of germicides, so that rarely is the use of strong germicides called for, at any rate, at the hands of the

public, and "Sanitas Fluid" is for most of such uses more than sufficiently strong, and may often, indeed, be diluted with several times its own quantity of water before use.

The only measure of utility of any disinfectant that is offered for public use is the extent to which it may be satisfactorily employed for the purposes for which it is advocated, and the *Lancet* Commissioners have not made any serious attempt to grapple with the problem from this, the only rational standpoint.

I am, Sir, yours truly,

C. T. KINGZETT, F.I.C., F.C.S.

Ex-Vice-President, Society of Public Analysts.

London, December 24th, 1909.

## OBITUARY.

BENJAMIN SAVAGE ROBINS, M.R.C.S.ENG., L.S.A.

WE regret to hear of the death of a well-known Midland practitioner. Mr. B. S. Robins, of Grantham Road, Sparkbrook, died on Sunday, December 19th, in his 78th year, and Birmingham thereby loses one of its oldest medical practitioners. As far back as 1849 he was articled to the General Hospital, under the late Mr. Oliver Pemberton, and was for a time House Surgeon, later occupying a similar position at the Wolverhampton Hospital. Mr. Robins subsequently joined Mr. John Archer, of Deritend, in partnership. For many years the deceased was Medical and Vaccination Officer for the Ashton Union, and for about forty years was a Certifying Surgeon under the Factory Acts, a position he held at the time of his death, which occurred from heart failure following an illness extending over two or three years. Mr. Robins was the oldest surviving member of the Union Club, having been elected in 1858. He took no part in political affairs, but was well-known in social circles. The deceased gentleman was the second son of Mr. John Robins, of Dunsley Hall, Kinver, and married a daughter of Mr. Arthur Dabbs, of Seckington, near Tamworth. He is survived by three sons and two daughters.

## REVIEWS OF BOOKS.

### MYOMATA OF THE UTERUS. (a)

THIS very fine monograph on a most important subject is a companion volume to Dr. Cullen's well-known works on Cancer of the Uterus, and on Adenomyoma of the Uterus. The book consists of some 35 chapters, and, in them, the subject under consideration has been discussed from every conceivable standpoint. To give a proof of Dr. Cullen's breadth of treatment it is only necessary to enumerate the titles of a few of the chapters:—Parasitic uterine myomata; dilatation of the uterine lymphatics associated with myomata; lipomyoma of the uterus; myosarcoma of the uterus; the condition of the uterine mucosa in cases of myoma; conditions found in the ligaments passing to or from the uterus in cases of myoma; the bladder in cases of myoma; the ureters in cases of myoma; analysis of the cases of uterine myomata found at autopsy in the pathological laboratory of the Johns Hopkins Hospital from the opening of the hospital to July 1st, 1906; pregnancy and uterine myomata; results of operations for uterine myomata.

By parasitic uterine myomata, the authors mean myomata that have for some reason become detached partially or almost completely from the uterus, and which receive their blood-supply from another source than the uterine vessels. The commonest source of the blood-supply of these parasites is the

(a) "Myomata of the Uterus." By Howard Kelly, Professor of Gynecology in the Johns Hopkins University, and Thomas S. Cullen, Associate Professor of Gynecology, Johns Hopkins University. Pp. xix. and 723. Philadelphia: W. B. Saunders Company. 1909.

omentum, and Dr. Cullen notes that in such cases there is, as a rule, a marked disappearance of the omental fat. There are also illustrations of myomata which received their nourishment from the rectum and from the mesentery of the small intestine, from the bladder and from the abdominal wall.

The different chapters dealing with the degenerations and changes in myomata are most interesting, and their illustrations are especially valuable. We cannot find, however, any reference to so-called "red degeneration." The term does not appear in the index, nor can we find any other term which might include it.

In the chapter on the symptoms associated with uterine myomata, there are some very interesting tables dealing with the fertility of women who develop such tumours. It appears that out of 1,149 cases of myomata, 842 of the patients were married, and 307 were single; 548 were sterile, 75 had had miscarriages, and 490 had borne children, prior to the operation. It thus appears that, of the married patients, 277 out of 842 were sterile. Dr. Cullen does not discuss the cause of this sterility, except to say that "we are still unable to say with any degree of certainty that the myoma *per se* was the direct cause of the sterility." We have said enough of the subject matter of the book to show what a valuable contribution it is to medical literature. Its illustrations are unsurpassed, and are in themselves a veritable atlas. We congratulate Dr. Cullen on his work, and Dr. Howard Kelly on his association with it.

#### ALLBUTT AND ROLLESTON'S SYSTEM OF MEDICINE (a)

THE present volume of Sir Clifford Allbutt's System of Medicine deals with the diseases of the heart and blood vessels. In the former edition its contents formed part of Volume V. and part of Volume VI. It thus has the advantage over its predecessor that it provides its readers with the diseases of the heart complete in a single volume instead of spread over two volumes and associated with other subjects. Considerable changes have been made in the different articles. The opening chapter dealing with the "Physics of the Circulation," which was originally written by Professor Sherrington, has been revised by Dr. James Mackenzie, who has added to it an account of the peripheral circulation, including arterial blood pressure. A new article on Stokes-Adams disease has been contributed by Professor Osler and Dr. Keith, while the article on over-stress of the heart has been re-written and contains a section by Dr. R. W. Mitchell—the outcome of his special opportunities of watching University athletes. The chapters on simple acute endocarditis and on the Diseases of the Mitral Valve have been re-written by Dr. Gibson. The account of functional disorders of the heart has been re-written and a new article has been added on Aneurysm, by Professor Osler.

The book is divided into two parts, the first of which deals with Diseases of the Heart, and the second, with Diseases of the Blood-vessels and Lymphatics. There are 85 illustrations, some of which are printed in colours, and three coloured plates. The references at the end of the chapters are very full, and have been corrected and brought up to date.

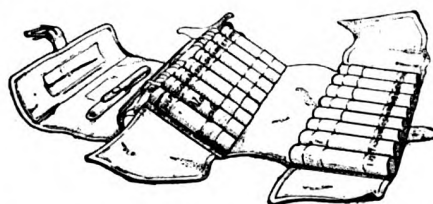
THE LORD MAYOR, on December 20th, re-opened the Metropolitan Hospital, on completion of the various structural alterations and improvements, which have necessitated the closing of the wards during the last few months. The total expenditure has been some £12,500, of which about one-fifth still remains to be collected.

(a) "A System of Medicine by many Writers." Edited by Sir Clifford Allbutt, K.C.B., M.D., F.R.C.P., Regius Professor of Physic in the University of Cambridge, and Humphry Davy Rolleston, M.D., F.R.C.P., Senior Physician to St. George's Hospital. Volume VI.—Diseases of the Heart and Blood-vessels. Pp. xiv. and 861. London: Macmillan and Co. 1909.

#### IMPROVEMENTS IN MEDICAL APPLIANCES.

AN interesting copy of report dated September 17th, 1909, has reached us concerning the British Antarctic Expedition, 1907-9, which was furnished with a very complete medical equipment by Messrs. Burroughs Wellcome and Co., consisting of "Soloid" and "Tabloid" preparations, which are the only forms that can be conveniently carried and preserved under such conditions. "The Congo Cases," runs the report, "were always used when at our base, and both the party of three who reached the South Magnetic Pole, and the party under Lieut. Shackleton, who attained a point 97 miles from the Geographical South Pole, carried a brown leather 'Tabloid' case, and all the 'Tabloid' products that remain are now in as good condition as when first handed over to my care two years ago. The *Nimrod* was also supplied with 'Tabloid' cases and equipment. The packets of compressed dressings were in an extremely convenient form, and the 'Tabloid' photographic outfit proved entirely satisfactory."

The following is an illustration of the "Tabloid" medicine case carried "Farthest South" by Lieut. Shackleton.



This was taken with the party of six that made the ascent of Mount Erebus, 13,350ft., and used on southern journey under Lieut. Shackleton, October 28th, 1908—March 4th, 1909. Latitude 88° 23' S. Longitude 162° E. Distance covered in this journey, 1,728 statute miles. Medicines quite satisfactory. The report is signed by E. P. Marshall, M.R.C.S., L.R.C.P., Surgeon to the British Antarctic Expedition, 1907.

#### ROGERS' KLORAM INHALER.

WE have received from Mr. Frank A. Rogers, of 327 Oxford Street, London, W., a new chloride of ammonia inhaler. We have tested this apparatus carefully and have no hesitation in saying it is one of the most compact and workmanlike appliances of the kind that has hitherto come under our notice. The method



is simplicity itself, and the inhaler, besides being convenient to use, contains few working parts, and is not likely to get out of order. The price is moderate, as the whole apparatus, with materials for a prolonged course of treatment, is supplied at 7s. 6d. A good idea of this compact inhaler can be obtained from the accompanying illustration.

## SUMMARY OF RECENT MEDICAL LITERATURE, ENGLISH AND FOREIGN.

*Specially compiled for THE MEDICAL PRESS AND CIRCULAR.*

**Advantage of the Combined Intra- and Extra-peritoneal Uretero-lithotomy for the Removal of Stones from the Lower Ureter.**—Jonas (*Amer. Journ. of Obs.*, LX, 5). There are three locations in the ureter where a stone is liable to be arrested: (1) An inch and a-half to two inches from the pelvis of the kidney as the ureter bends over the psoas muscle; (2) in the bend of the ureter one to two inches below the basis of the pelvis; (3) in the vesical portion. The usual operation for stone in the vesical portion is intra-vesically. When the stone is situated an inch or more from the bladder wall this method is not safe, and the combined intra- and extra-peritoneal method is recommended. Ureter stones lodged near the pelvis of the kidney are best removed extra-peritoneally through the incisions as used for exploring the kidney. The danger of urinary fistula from incision of the ureter is extremely slight if the passage to the bladder is free. Direct drainage of the pelvis of the kidney is preferable, since we believe that most ureter stones originate in the kidney pelvis this should be drained in almost all cases, even though the conditions for natural drainage are favourable. We possibly underestimate the frequency of primary ureter stones since in the majority of cases only one stone is found. The operation must aim (1) to remove the stones, and (2) to prevent the recurrence. The proper treatment for stones in the lower ureter is a laparotomy which allows a thorough examination into possible causes for the lodging of the stone, or for the origin of the stone *in situ*, removal of the cause, adhesions, twists, etc., if found intra-peritoneally, and then removal of the stone extra-peritoneally. F.

**Ovarian Pregnancy at Term, with Recovery of Mother and Child.**—Kirchner (*Amer. Journ. Obst.*, LX, 5). The patient entered hospital believing she was pregnant and beyond term. She expected to be confined on November 15th, and on this day she began to have pains. Twelve days later the patient came to hospital. The abdomen was enlarged as in pregnancy but asymmetrically, the left side being fuller than the right. Fœtal heart sounds were easily heard, loudest to the left and below umbilicus. A long median incision was made, there were numerous omental and intestinal adhesions. The mass when it was cleared resembled an ovarian cyst, and when opened revealed a fœtus. The incision went through the placenta. The child was easily resuscitated. The sac was shelled free from the abdominal cavity; it originated from the right side in the region of the ovary, and here the main blood supply was obtained. The patient ultimately made a good recovery. The left ovary and tube were normal. The right ovary was not found; the right tube was firmly adherent externally to the sac, but otherwise normal. The character of the sac is that of an ovarian cyst, and gave microscopical evidence of ovarian structure. F.

**The New Point in Diagnosis between Appendicitis and Tubal Disease.**—Morris (*Amer. Journ. of Obst.*, LX, 5). The writer points out that about an inch and a-half to the right of the navel close to the spinal column we find the right group of lumbar ganglia. Hypersensitiveness on deep pressure at this point seems to indicate that the appendix alone is affected. When the left group of ganglia is hypersensitive it points to pelvic inflammation. F.

**Considerations on the Statics of the Pelvic Viscera and their Relationship to the Operative Treatment of Utero-Vaginal Prolapse.**—Cassalis (*Journ. Obs. and Gyn. Brit. Emp.*, XVI, 5), having considered the anatomical aspect in the preceding part of the journal, says,

when a uterus is permanently retroflexed or retroverted but still mobile, it cannot be restored to anteversion and maintained so, unless some means is found of altering the stretched ligamentary attachment. Shortening of the round or utero-sacral ligaments is the operation based on the soundest principles. Gilliam's operation has an advantage over Alexander's in that it attaches the round ligament at its strongest place to the abdominal wall, but unfortunately divides the pelvis into three segments liable to cause incarceration of the bowel. This accident happened in a case with the author. Uterine retro-deviations, when the uterus is enlarged and heavy and the perivascular sheaths overstretched, require something more than a mere suspension. Descensus there or partial prolapse exactly defines this variety, as it only implies a giving way of the upper pelvic segment. These are the cases in which a well-fitting Hodge when the pelvic floor is complete gives so great relief, but one also where operative treatment, when mechanical aids have ceased to be of use, is difficult, and frequently unsuccessful. The reason is that the organ, although anteverted, has not gained its normal plane in the pelvis. Ventro-fixation is the operation best suited to these cases, and if it is contra-indicated for women still in the child-bearing period of life, it is the operation *par excellence* of the post-menopause period. Relaxation of both upper and lower pelvis planes gives rise to prolapsus uteri. The author has for some years adopted a modified Lawson-Tait's operation combined with a myorrhaphy of the levator ani, and this in severe cases combined with a solid ventro-fixation is almost always curative. He has never seen a case return with a relapse. F.

**Post-Operative Psychosis.**—Kelly (*Surg. Gyn. and Obst.*, IX, 5). The author records 40 cases, and excludes all except definite mental aberrations and cases where delirium might be due to infection, intoxication, drug, or drink habit. The psychoses seem as common after mild as after severe operations; seven were after simple repair of the perinæum. In only 12 out of the 40 cases was double oöphorectomy performed. The author does not deny that there may be some mental instability in most instances, yet is convinced that a perfectly sound individual may develop a post-operative psychosis. The insanity does not conform to any one type, the most common is acute hallucinatory confusional insanity, and this is the type found in absence of predisposition to another type. There are marked delusions and hallucinations, a distinct confusion of the intellect, and great motor excitement at times. The majority begin showing symptoms between the second and tenth days. Eight of the forty started almost immediately after the operation. The duration is variable, the shortest period in the series was two weeks, advancing from that to permanent insanity. To avoid the complication it is advised to postpone operation if possible until the patient is better disposed to it if she is showing great fear of the operation, is convinced she will die, not sleeping well, showing unusual nervous symptoms, and particularly in presence of bad family history. F.

**The Use of Scopolamine-Morphine.**—Thomson and Cottrell (*Edinburgh Medical Journal*, December, 1909) publish the results of an experience of 180 cases, in which scopolamine and morphine were used as adjuncts to a general anæsthetic. Two methods of administration were employed:—(1) An injection of 1/64th gr. of scopolamine bromohydrate with 1/6th gr. morphine sulphate two hours before the operation: (2) three successive doses of 1/120 gr. scopolamine, with 1/4th gr. morphine, given 2½, 1½, and ½ hour

before operation. The latter method was used in most of the cases, and was, we take it, that approved by the authors. The first injection generally put the patient to sleep, and the second could be given without disturbing him. In many cases general anæsthesia was induced without arousing him. For most operations a light general anæsthesia was sufficient, though in abdominal operations deep anæsthesia was advisable. In cases where struggling occurred, the patient retained no memory of pain. No attempt was made to dispense with the general anæsthetic, and chloroform was commonly employed. The authors conclude that the administration of scopolamine does away with preliminary fear, and therefore adds to the safety of the operation. The quantity of general anæsthetic required is diminished. Moreover, mucous secretion is lessened, and the task of the anæsthetist thereby lightened. There is but little sickness after operation, and the prolonged sleep spares the patient much pain and discomfort. R.

**Passage of Bacteria through Wall of Strangulated Intestine.**—Ikonnikoff (*Annales de l'Institut Pasteur*, November 25th, 1909) reports interesting observations on the passage of microbes through the wall of the intestine in cases of experimental strangulation. The strangulation was produced by slipping two or three centimetres of gut through a sterilised rubber ring of five millimetres diameter. The observer found that the passage of bacteria through the wall was related to the phenomena of necrosis, together with desquamation of the lining epithelium. Moreover, the rapidity of the passage of bacteria depended on the degree of necrosis. The organisms most commonly found were those anaerobes, which digest albuminoid material, while the *bacillus coli* and cocci were only found where the necrosis of the tissues was very intense. R.

## MEDICAL NEWS IN BRIEF.

### National University of Ireland.

At a meeting of the Senate, held on December 22nd, 1909, it was unanimously agreed that provision should be made by the University for holding the examinations for all degrees of the University for students of University College, Dublin, in University College, Dublin, and for students of University College, Cork, in University College, Cork.

It was ordered that advertisements be issued for Extern Examiners for the subjects of the medical examinations for the year 1910.

A Committee was appointed for drafting such regulations as are contemplated by the Charter and Statute A of the University.

Tuesday, April 5th, 1910, was fixed as the date at which the Spring Medical Examinations of the University will begin.

### Society of Tropical Medicine and Hygiene.

At a meeting of this society, held last week, the following resolutions were unanimously passed:—"That this society, recognising the great services rendered by Sir Alfred Jones, K.C.M.G., to tropical medicine, desires to record its appreciation of these services and sense of loss in his death. Further, that the secretaries be instructed to communicate this resolution to Sir Alfred Jones's family and to convey to them the sympathy of the society in their bereavement." "That the President be requested, on behalf of the Fellows of this society, to convey to Mr. Otto Beit their high appreciation of the great benefit which he has conferred on the study of disease, including tropical disease, by his munificent grant for the endowment of research."

### The Health of London.

DR. COLLINGRIDGE, Medical Officer of Health, has reported to the City Corporation that in the last three weeks the death-rate in the City was 16.2 per 1,000,

as compared with 15.8 in the 76 great towns of England and Wales. The City birth-rate was 10.5, as compared with 23.4 elsewhere. Eight cases of infectious disease were reported, and 14 notifications of pulmonary tuberculosis were received. Of 571 houses visited, 13 were in an insanitary condition. Nearly four tons of unsound tinned food were destroyed at wharves. Of 118 dairies and milkshops visited, all were found in a satisfactory state of cleanliness. Thirty samples of food and drugs had been examined by the analyst, and two of them (milk) were adulterated. At the markets and slaughter-houses 46 tons of meat—of which 16 tons were frozen—were condemned and destroyed. The inspection of Chinese pork continued. Of 3,861 carcasses dealt with, 286 had been condemned. At the mortuary 28,485 articles of clothing had been disinfected, and 11 inquests held.

### The Medical Care of Immigrants.

OWING to the refusal of certain steamship companies operating between New York and Europe to be responsible for the hospital bills of sick immigrants, the United States Commissioner of Immigration has notified the companies that the Government will not be responsible, and it is affirmed that the action of the companies will result in increased deportations, as none will be permitted to land from any ocean steamer until after examination by the ship's surgeon.

### Royal Army Medical Corps.

CAPT. A. E. F. HASTINGS has been detailed as Medical Officer of the first and second camps of artillery training at Bargarh. Lieut.-Col. H. W. Austen has been granted leave of absence from the 23rd inst. to January 21st. Major A. H. Morris has been granted leave of absence from the 28th inst. to February 26th, with permission to travel in France and Switzerland. Major B. H. Scott has been granted leave of absence from January 1st to February 28th.

### The Volunteer Medical Service.

It has been decided that officers of the Volunteer Medical Service who transferred to the Territorial Force, but decided to remain with the Territorial Force unit into which their Volunteer unit was converted, do not retain the right to time promotion to the rank of lieutenant-colonel.

### Board of Guardians' Dispute with Medical Officer.

OBJECTION having been taken by a section of the Aberystwyth Board of Guardians to pay a charge of £1 rs. sent in by a local practitioner, who was called in by Dr. Bonsall, Medical Officer, to assist in administering an anæsthetic, it was agreed to submit the whole of the facts to the Local Government Board.

A reply was read from the Local Government Board at the meeting of the Aberystwyth Guardians on December 20th. The letter stated:—"The Board infer that the case was one of exceptional difficulty, for which a district Medical Officer would have been entitled, under Article 183 of the General Consolidated Order, to the sum of £2. They understand that Dr. Bonsall, under his contract, will only receive 15s. for the case, and that a charge of 21s. has, in fact, been made upon him by the anæsthetist for his necessary assistance in the emergency; so that if the guardians only repay 10s. 6d. of the amount, Dr. Bonsall's personal remuneration for his services in the case will only amount to 4s. 6d. The Board are sure that the guardians will recognise that this remuneration cannot be regarded as sufficient, and they trust that on further consideration they will be willing to repay the whole amount (21s.) of the anæsthetist's fee."

The letter was referred to the House Committee.

THE Wood Green, Hornsey, and Southgate Hospital will, it has been decided by the District Council, receive in future a grant of £120 per annum from the Wood Green Urban District Council.

## NOTICES TO CORRESPONDENTS, &c.

**CORRESPONDENTS** requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

### SUBSCRIPTIONS.

SUBSCRIPTIONS may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s.; post free at home or abroad. Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially-appointed agents. Indian subscriptions are Rs. 15.12. Messrs. Dawson and Sons are our special agents for Canada.

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Small announcements of Practices, Assistantships, Vacancies, Books, &c.—Seven lines or under (70 words), 4s. 6d. per insertion; 6d. per line beyond.

ORIGINAL ARTICLES or LETTERS intended for publication should be written on one side of the paper only and must be authenticated with the name and address of the writer, not necessarily for publication but as evidence of identity.

CONTRIBUTORS are kindly requested to send their communications, if resident in England or the Colonies, to the Editor at the London office; if resident in Ireland to the Dublin office, in order to save time in reforwarding from office to office. When sending subscriptions the same rule applies as to office; these should be addressed to the Publisher.

DR. J. C. T. (Bognor) is thanked for his communication, which, had it been received three weeks earlier, we should have been glad to announce.

RESPECT FINEM (Leeds).—The point stated by our correspondent is somewhat involved. If he will communicate with us more fully, we will be glad to advise him.

### HOTEL DIETETICS ON THE RIVIERA.

WE have received from the management of one of the large hotels (Hotel Prince de Galles) a letter announcing that "complete arrangements have now been made for providing an alimentary regime, which will give entire satisfaction to physicians sending patients." The diet tables are provided especially for patients suffering from stomach and nervous troubles, who are ordered a special regime, and the management of this hotel state that these are strictly prepared according to medical prescriptions.

EX ÆQUALI (Bridgewater).—The case is certainly one which is worthy of publication. If our correspondent will forward us his notes, we will find space to publish them.

M.R.C.S., L.R.C.P.—We cannot publish our correspondent's letter, since it deals mostly with points of present political controversy. Medical men, of course, are entitled to hold what political opinions they like, but the journals devoted to purely professional subjects are not the place in which to discuss them.

M.D., M.R.C.P.—Our correspondent is thanked for his communication, which shall receive early attention.

MOLAR.—Besides the two dental hospitals named, a complete dental department exists at Guy's, where the education for the I.D.S. can be obtained.

## Appointments.

- CLIFFORD, HAROLD, M.B.Lond., F.R.C.S.Edin., Registrar to the St. Mary's Hospitals, Manchester.
- COLLINS, G. F., L.R.C.P.Irel., M.R.C.S., Certifying Surgeon under the Factory and Workshop Act for the Sutton Bridge District of the County of Lincoln.
- FITZWILLIAMS, DUNCAN C. L., M.D., Ch.M., F.R.C.S.Edin., F.R.C.P.Eng., Surgeon-in-Charge of Out-patients at St. Mary's Hospital.
- GORDON, S. G., L.R.C.S., L.R.C.P.Irel., Assistant Resident Surgeon at the General Dispensary, Nottingham.
- HOBBS, EDWARD COOMBER, M.R.C.S., L.R.C.P.Lond., House Physician to the West London Hospital, Hammersmith.
- MCCULLY, D., M.R.C.S., L.R.C.P., House Physician at University College Hospital.
- MACMAHON, A. P., M.B., B.S.R.U.I., Certifying Surgeon under the Factory and Workshop Act for the Clondalkin District of the County of Dublin.
- RAYNER, H. H., M.B., B.Ch.Vict., F.R.C.S.Eng., Honorary Surgeon for Children at the Northern Hospital, Manchester.
- SHATTOCK, C. E., M.R.C.S., L.R.C.P., Obstetric Assistant to University College Hospital.
- SHAW, W. F., M.D.Vict., Pathologist to the St. Mary's Hospitals, Manchester.
- SIMPSON, GRAHAM, F.R.C.S.Eng., to the Lectureship in Operative Surgery in the University of Sheffield.

## Vacancies.

Manchester Children's Hospital (Out-patients' Department).—Assistant Medical Officer. Salary £100 per annum. Applications to H. J. Easton, Secretary.

- The Hospital for Sick Children, Great Ormond Street, London. W.C.—House Surgeon. Applications to the Secretary. Salary £30 for six months, washing allowance £2 10s., with board and residence in the Hospital. (See advt.)
- Liverpool School of Tropical Medicine.—Research Students on Malaria, Parasitology, and Pathological Chemistry. Salaries: £150 to £250 per annum. Applications to Professor Ross, University of Liverpool.
- Liverpool School of Tropical Medicine.—Research Assistant at the Runcorn Laboratories. Salary £120. Applications to Director, Crofton Lodge, Runcorn.
- Kent County Asylum, Chartham.—Third Assistant Medical Officer. Salary £145 per annum, with board, quarters, attendance, and washing. Applications to Medical Superintendent, Chartham, near Canterbury.
- Borough of Batley.—Medical Officer of Health. Salary £150 per annum. Applications to J. H. Craik, Town Clerk, Town Hall, Batley.
- Wye House Asylum, Buxton.—Assistant Medical Officer. Salary £120 per annum, all found. Applications to the Medical Superintendent.
- East London Hospital for Children and Dispensary for Women, Shadwell, E.—House Physician. Salary £75 per annum, with board, residence, laundry, etc. Applications to W. M. Wilcox, Secretary.

## Births.

- CORNWALL.—On Nov. 28th, at Westcliffe, Oconoor, the wife of Major J. W. Cornwall, I.M.S., of a son.
- HOTCHKISS.—On Dec. 20th, at Mid-Dykebar, Paisley, the wife of Robert Dunmore Hotchkiss, M.D., of a son.

## Marriages.

- PURDOM.—COUSINS.—On Dec. 21st, at Southend-on-Sea, William Percy Purdom, M.B., B.S.Lond., second son of Dr. and Mrs. Purdom, of Ellerslie, Park Hill Road, Croydon, to Violet Elizabeth, third daughter of the late Mr. W. C. A. Cousins, of London.

## Deaths.

- LLORD.—On Dec. 18th, at Mackay, Queensland, George Tyndale Lloyd, M.A., M.B., B.C.Oamb., only son of the late Rev. Thomas Lloyd and Mrs. Lloyd, of Slepe Hall, St. Ives, Hunts, aged 45. (By cable.)
- TAYLER.—On Dec. 17th, at Daitotei, Formosa, George Padgett Tayler, M.B., eldest son of G. O. Tayler, M.D., of Trowbridge, aged 35. (By cable.)

## OPERATIONS—METROPOLITAN HOSPITALS.

- WEDNESDAY.—St. Bartholomew's (1.30 p.m.), University College (2 p.m.), Royal Free (2 p.m.), Middlesex (1.30 p.m.), Charing Cross (3 p.m.), St. Thomas's (2 p.m.), London (2 p.m.), King's College (2 p.m.), St. George's (Ophthalmic, 1 p.m.), St. Mary's (2 p.m.), National Orthopaedic (10 a.m.), St. Peter's (2 p.m.), Samaritan (9.30 a.m. and 2.30 p.m.), Gt. Ormond Street (9.30 a.m.), Gt. Northern Central (2.30 p.m.), Westminster (2 p.m.), Metropolitan (2.30 p.m.), London Throat (9.30 a.m.), Cancer (2 p.m.), Throat, Golden Square (9.30 a.m.), Guy's (1.30 p.m.).
- THURSDAY.—St. Bartholomew's (1.30 p.m.), St. Thomas's (3.30 p.m.), University College (2 p.m.), Charing Cross (3 p.m.), St. George's (1 p.m.), London (2 p.m.), King's College (2 p.m.), Middlesex (1.30 p.m.), St. Mary's (2.30 p.m.), Soho Square (2 p.m.), North-West London (2 p.m.), Chelsea (2 p.m.), Great Northern Central (Gynaecological, 2.30 p.m.), Metropolitan (2.30 p.m.), London Throat (9.30 a.m.), St. Mark's (2 p.m.), Samaritan (9.30 a.m. and 2.30 p.m.), Throat, Golden Square (9.30 a.m.), Guy's (1.30 p.m.).
- FRIDAY.—London (2 p.m.), St. Bartholomew's (1.30 p.m.), St. Thomas's (3.30 p.m.), Guy's (1.30 p.m.), Middlesex (1.30 p.m.), Charing Cross (3 p.m.), St. George's (1 p.m.), King's College (2 p.m.), St. Mary's (2 p.m.), Ophthalmic (10 a.m.), Cancer (2 p.m.), Chelsea (2 p.m.), Great Northern Central (2.30 p.m.), West London (2.30 p.m.), London Throat (9.30 a.m.), Samaritan (9.30 a.m. and 2.30 p.m.), Throat, Golden Square (9.30 a.m.), City Orthopaedic (2.30 p.m.), Soho Square (2 p.m.).
- SATURDAY.—Royal Free (9 a.m.), London (2 p.m.), Middlesex (1.30 p.m.), St. Thomas's (2 p.m.), University College (9.15 a.m.), Charing Cross (2 p.m.), St. George's (1 p.m.), St. Mary's (1 p.m.), Throat, Golden Square (9.30 a.m.), Guy's (1.30 p.m.).
- MONDAY.—London (2 p.m.), St. Bartholomew's (1.30 p.m.), St. Thomas's (3.30 p.m.), St. Mary's (2 p.m.), St. George's (2.35 p.m.), Middlesex (1.30 p.m.), Westminster (2 p.m.), Chelsea (2 p.m.), Samaritan (Gynaecological, by Physicians, 2 p.m.), Soho Square (2 p.m.), Royal Orthopaedic (2 p.m.), City Orthopaedic (4 p.m.), Great Northern Central (2.30 p.m.), West London (2.30 p.m.), London Throat (9.30 a.m.), Royal Free (2 p.m.), Guy's (1.30 p.m.).
- TUESDAY.—London (2 p.m.), St. Bartholomew's (1.30 p.m.), St. Thomas's (3.30 p.m.), Guy's (1.30 p.m.), Middlesex (1.30 p.m.), Westminster (2 p.m.), West London (2.30 p.m.), University College (2 p.m.), St. George's (1 p.m.), St. Mary's (1 p.m.), St. Mark's (2.30 p.m.), Cancer (2 p.m.), Metropolitan (2.30 p.m.), London Throat (9.30 a.m.), Royal Free (3 p.m.), Samaritan (9.30 a.m. and 2.30 p.m.), Throat, Golden Square (9.30 a.m.), Soho Square (2 p.m.).



# Medical Press

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**AMYLACEOUS DYSPEPSIA.** "In no case did I find Taka-Diastase fail in giving good results."—*Lancet*, August 7, 1897.

**DYSPEPSIA.** Excellent results in many obstinate cases.—*Liverpool Med. Chir. Jour.*, Jan. 1897.

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**TUBERCULOSIS.** A powerful aid to nutrition and increased strength.—*Medical Magazine*, June, 1906.

**CHRONIC CONSTIPATION.**—"Often brings about a cure in the most obstinate cases."—*Therapeutic Gazette*, October 15, 1906.

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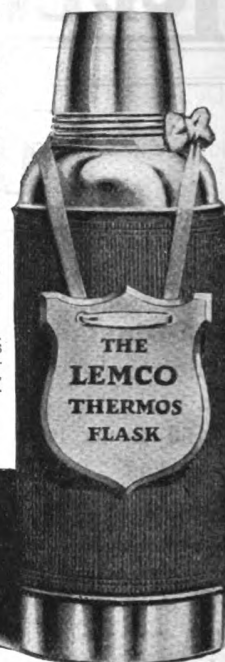
Taka-Diastase	...	...	...	1 grain.
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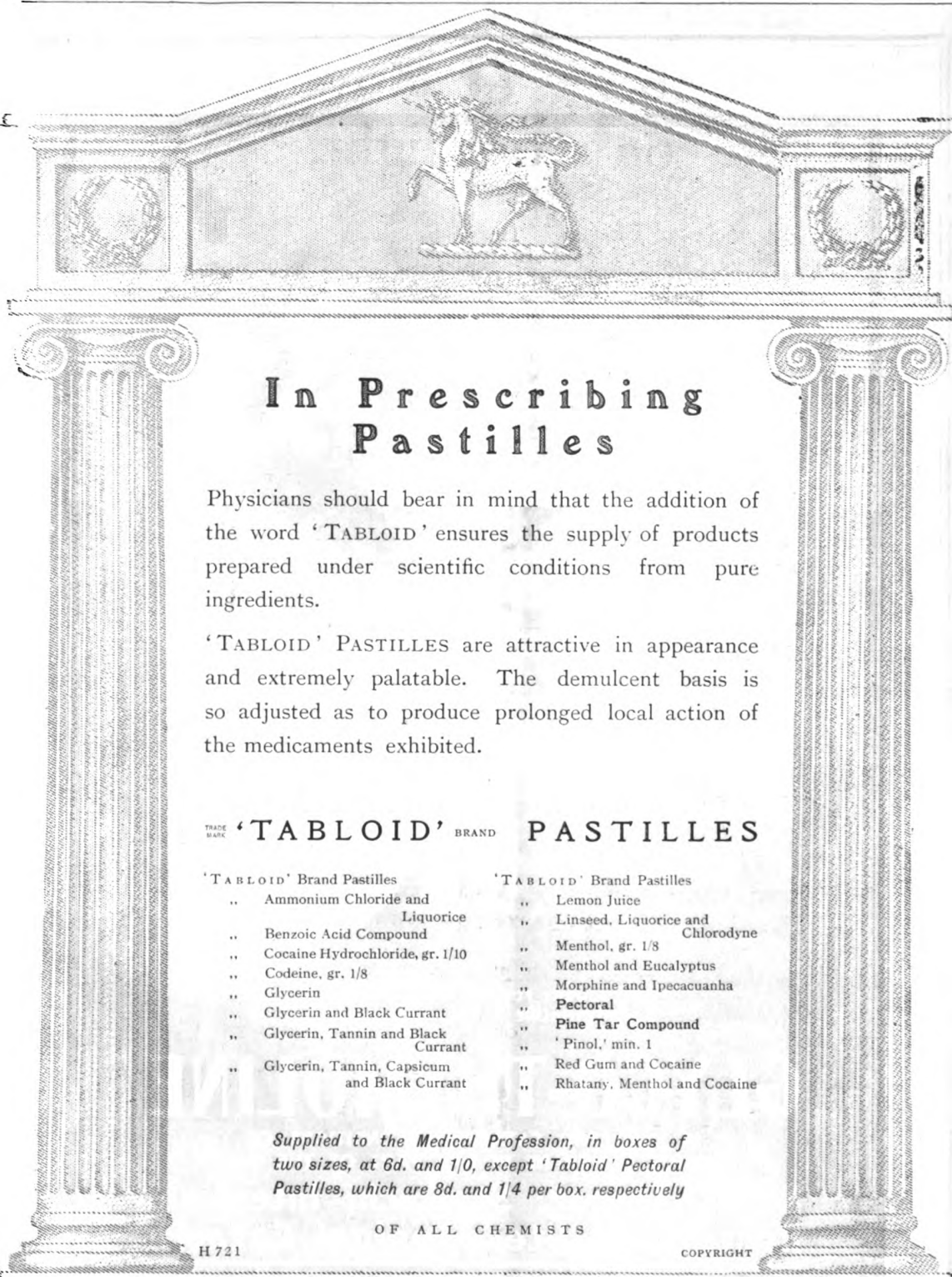
Taka-Diastase	...	...	...	2 grains.
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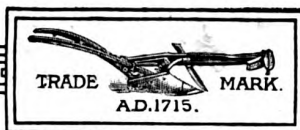
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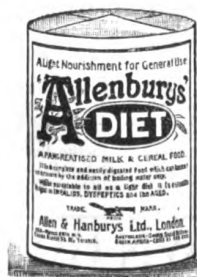


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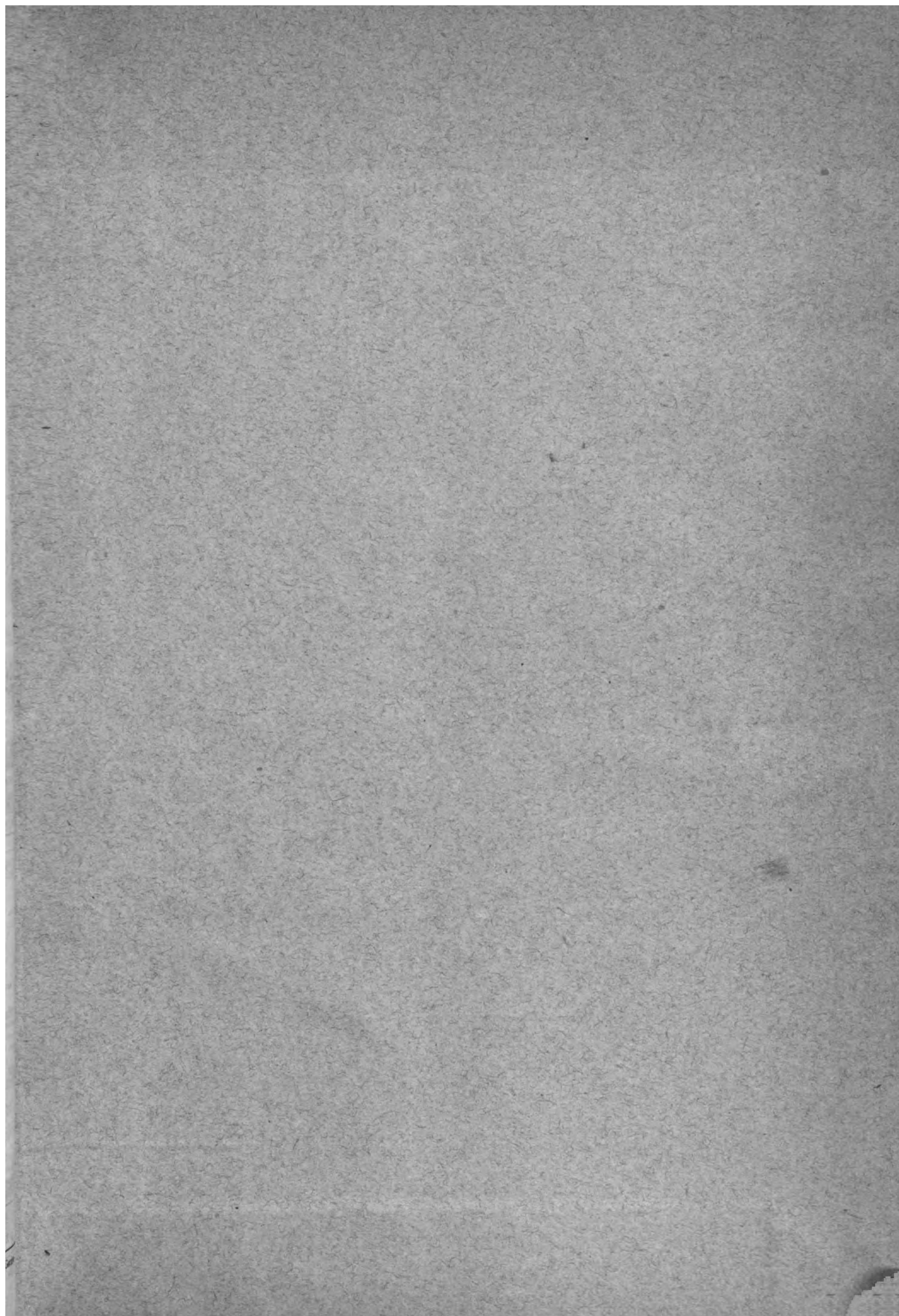
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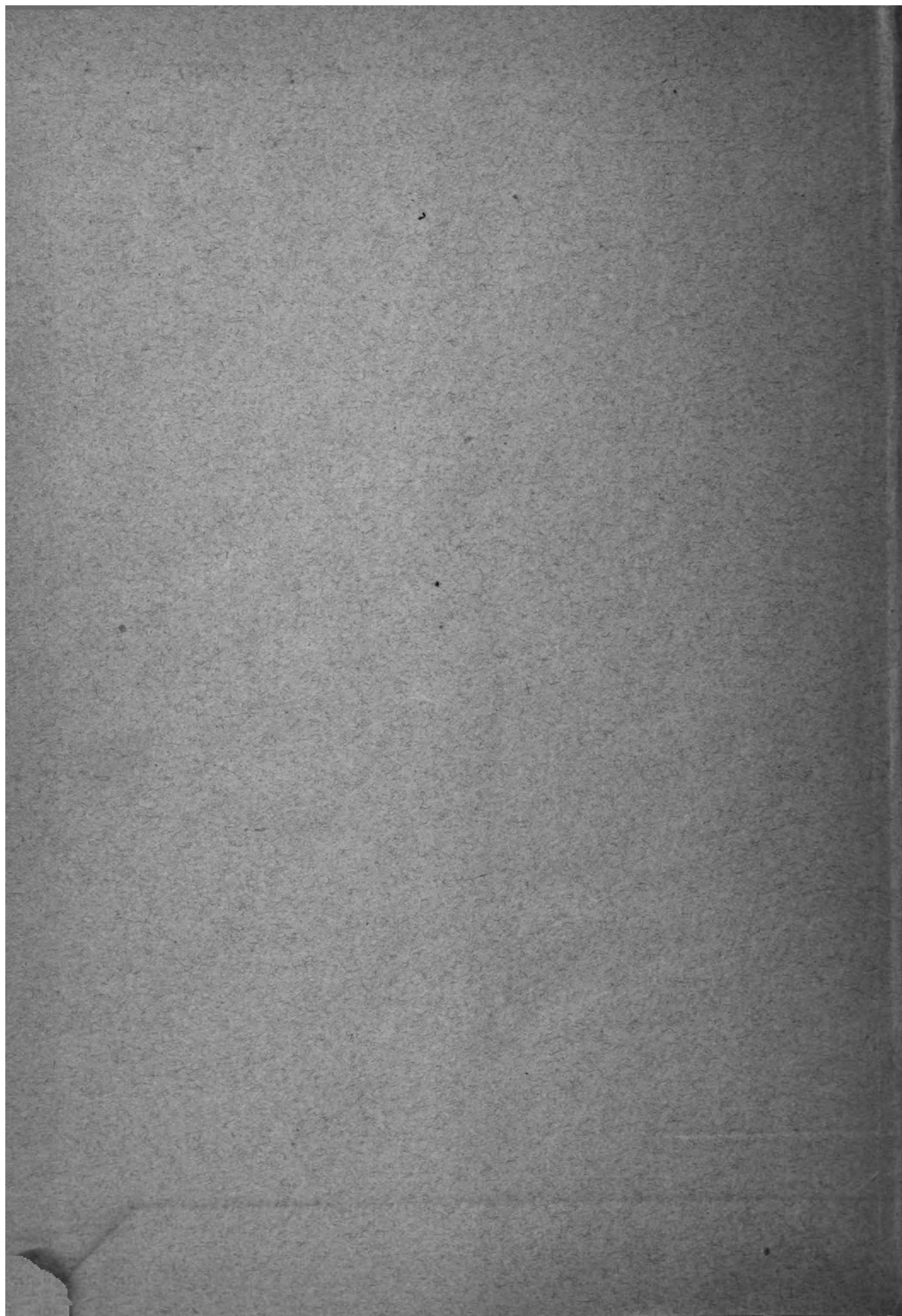
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